REALTORS® & Smart Growth

# on common ground

SUMMER 2014



## Meeting Our Environmental Challenges

When the first Earth Day was celebrated in 1970, environmental concerns focused primarily on addressing the pollution of air and water. Over the decades since then, the scope of environmental issues has expanded to include energy conservation, rising sea levels, extreme weather events, farmland preservation, and the multiple benefits to land, water, and air that come from reducing sprawl and providing alternative transportation options.

In this issue of On Common Ground, we provide an overview of this wider range of environmental issues our communities — and property owners — will face in the future.

Severe weather events and the large toll they have taken in lives and property damage have brought a new focus on enhancing the ability of cities to rebound more quickly from these disasters. Planning for resilience is now a major objective of many communities. Additionally, many cities on the East Coast are facing what it might take, and how expensive it will be, to protect low-lying property from rising seas.

Reducing energy use in homes and communities benefits the bottom line, while reducing the production of greenhouse gases. As two articles in this issue describe, REALTORS® are becoming leaders in understanding and marketing green homes and in leading the way toward more energy-efficient homes.



Our development patterns have a big impact on our energy use and air quality. As reported in this issue, California is leading the way in coordinating transportation projects with land-use plans, and in tying them both to goals for reducing greenhouse gas emissions. Nationwide, we can expect to see, due to market forces, resiliency goals, and climaterelated regulations, a reduction in the sprawling development patterns that dominated the second half of the 20th century.

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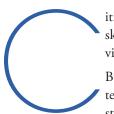


# Building RESILIENT Cities



2008 flooding in Cedar Rapids, Iowa. Photo by Waratuman2

By Brad Broberg



ities like to brag about their glittering skylines, trendy neighborhoods and vibrant culture. The sexy stuff.

But sexy won't save a city from disaster. What matters most when calamity strikes is resilience.

Resilience is the new sustainability, but while sustainability seeks balance with the environment, resilience is about more than going green. It's about creating communities that can withstand adversity — be it a storm or a recession or some other tribulation — and bounce back quickly when disaster strikes.

In some ways, it's a distinction without much difference. In other ways, it captures an evolving mindset about how cities are planning for the challenge of climate change — including rising sea levels and extreme weather — and other potential threats to their citizens, infrastructure and quality of life.

Just ask the city of New York. Before Hurricane Sandy battered the Big Apple, the city's planning mantra was, "A Greener, Greater New York." In the wake of the October 2012 superstorm, it's become, "A Stronger, More Resilient New York."

# What matters most when calamity strikes is resilience.



U.S. Fish and Wildlife Service oversees beach restoration at Kimbles Beach on New Jersey's Delaware Bay. Photo by Eric Schrading - USFWS

"Nobody was really using the word resilient much prior to Hurricane Sandy," says Mark Focht, president of the American Society of Landscape Architects (ASLA). "After Hurricane Sandy, it started to emerge, and with New York's plan, it started to gain traction."

Focht chose resilience as the theme for this year's annual ASLA conference — partly as a nod to the professional resilience shown by the ASLA during the recession but also in recognition of the growing buzz resilience is generating as a planning and development goal.

The Rockefeller Foundation launched a 100 Resilient Cities Network last year. Eleven U.S. cities — including New York and Hurricane Katrina target New Orleans — were among the first 33 cities invited to join the worldwide network, which is providing support for cities to hire chief resilience officers and to develop resilience plans.

The Environmental Protection Agency (EPA) published a guide last year to help communities in the Washington, D.C., area become more resilient using smart growth strategies like compact development, which relieves pressure to build on open space vulnerable to storm surges and other dangers. A nationwide guide is due out next year.

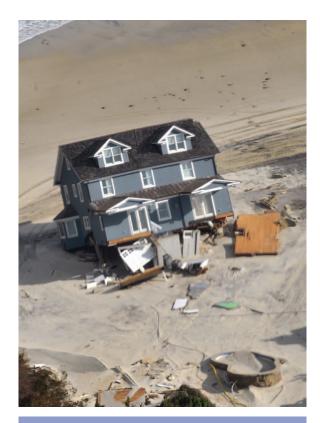
This year's New Partners for Smart Growth Conference, sponsored by the nonprofit Local Government Commission, included a session on using smart growth to build disaster-resilient economies. Speakers from three disaster-stricken communities — Longmont, Colo., Springfield, Mass., and East Central Iowa — shared lessons learned and steps taken to better withstand future adversity.

"Historically, there's not been a strong connection between comprehensive planning and disaster-resiliency," says Shawn Lewis, assistant city manager of Longmont. "It has become much more in the forefront as we've seen disasters — particularly weather-related — increasing in numbers."

In September 2013, record rainfall caused widespread flooding in Colorado, including Longmont, where the St. Vrain River spilled over its banks, displacing hundreds of residents, damaging property and leaving the city of 88,000 with a \$152-million repair and recovery bill.

Yet it could have been worse. "The flood revealed more ways in which we were resilient than ways we weren't," Lewis said.

EPA published a guide to help communities become more resilient using smart growth strategies.



Damage on the New Jersey shore. Photo by N.J. National Guard

rost-pandy sand placement at Rockaway Beach.
Approximately 3.5 million cubic yards of sand is placed to reduce risk from future storms.
Photo by U.S. Army Corps of Engineers



When the wastewater treatment plant flooded, the city was able to operate it remotely because it had installed a fully integrated electronic control system. The system also enabled the city to shut down valves at various locations without dispatching crews.

In addition, the city built redundancy into its electrical system. When a substation near the river flooded, it was able to reroute service through other substations and escape any long-term power outages.

Longmont's biggest failure, Lewis says, occurred decades before when it permitted a large mobile home park to locate in the St. Vrain flood plain. After the 2013 cataclysm swamped the park, the city bought the property as part of a plan to rechannel the river for flood control.

"We could have done that earlier, but there wasn't any sense of urgency," Lewis says. "Many people thought there wasn't any immediate danger to the people who lived there."

The flood also prompted the city to hit the reset button on a new plan to guide development along the St. Vrain River corridor, Lewis says. Instead of focusing first on the land around the river, priority one is making sure the river has the capacity to accommodate future storms.

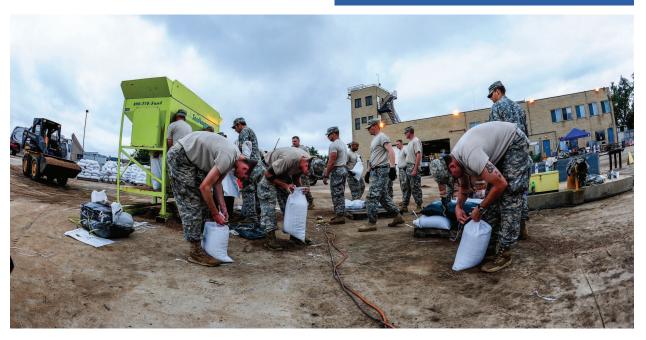
Iowa also is no stranger to flooding of biblical proportions. In the spring of 2008, rivers swollen by record rains inundated communities and forced widespread evacuations. Cedar Rapids was hit especially hard as the Cedar River crested at 19 feet above flood level, submerging 10 square miles of the city and most of the downtown.

The flood was devastating, causing billions of dollars in damages, but also a turning point. "The silver lining of a natural disaster is it allows you in many instances to start over ... and think about things differently," says Doug Elliott, executive director of the East Central Iowa Council of Governments (ECICOG).

In East Central Iowa, the floods underscored the need for greater regional collaboration. "Natural disasters don't recognize jurisdictional boundaries," Elliott says. "Part of resilience is trying to maximize existing resources and eliminate duplications of effort."

Part of resilience is trying to maximize existing resources and eliminate duplications of effort.

The Colorado National Guard response to 2013 flooding. Photo by the Colorado National Guard





Prospect neighborhood, Longmont, Colo.

That mindset led the ECICOG and a private business group to merge previously separate economic development initiatives and fold a regional transportation plan into a combined document — the Comprehensive Regional Development Strategy (CRDS) — covering six counties.

"We've been able to build new partnerships and relationships between neighboring jurisdictions and the public and private sector ... that benefit the region," Elliott says.

Out of the CRDS has come: a Multi-Disciplinary Safety Team to better respond to transportation safety issues during disasters and on a regular basis; a Regional Workforce Development Plan to address the problem of young people leaving the area to work elsewhere; and a Multi-Jurisdictional Hazard Mitigation Plan for Johnson County to help the county's 17 units of local government address mutual risks from natural disasters and other dangers.

Springfield, Mass., was hit by a rare tornado in June 2011 that destroyed or damaged blocks and blocks of homes and businesses — many in some of the city's most depressed neighborhoods. Rather than just repair the damage, Springfield created a comprehensive revitalization plan to both recover from the tornado and become more resilient by improving quality of life for its residents.

"We spent a lot of time on walkability, access to transit and increased green space. There are many smart growth policies embedded in the plan," says Jay Minkarah, president of DevelopSpringfield, a nonprofit redevelopment agency that helped produce the plan.

None of that will protect Springfield against another tornado or other natural disaster, but it will make the city a healthier and more attractive place to live and do business, strengthening the resiliency of the city by

# RESILIENT DESIGN

# In Action

### **Buildings should:**

- Protect mechanical systems from flooding and other extreme weather events by taking steps such as locating systems on upper floors.
- Reduce dependence on complex controls and systems and provide manual overrides in case of malfunction or temporary power outages.
- Reduce energy demand and rely on passive heating and cooling strategies to maintain livable conditions in the case of extended loss of power or heating fuel.

#### Communities should:

- Minimize dependency on food and fuel sourced from far away.
- Rely on natural systems to help control erosion and manage stormwater.
- Consider potential extreme weather events and climate change in determining locations of critical facilities and systems.

### Regions should:

- Work to achieve a more diverse regional economy.
- Develop regional transportation networks that can transport not only people, but food and other critical needs during emergencies.
- Adopt policies that recognize ecosystem services such as healthy forests that purify air and coastlines that buffer against storms.

Source: Alex Wilson, founder and president, Resilient Design Institute, Brattleboro, Vt. (Right) U.S.Air National Guard response to 2008 flooding in Cedar Rapids, Iowa. Photo by Staff Sgt Oscar M Sanchez-Alvarez

> (Below) Flooded street near 13th Ave and J St., in Cedar Rapids, Iowa.

Photo by Don Becker, U





strengthening the physical and economic wellbeing of its citizens, Minkarah said.

New York is supposed to be the city that never sleeps, but Hurricane Sandy gave it a serious wake-up call. Sandy destroyed more than 800 buildings and seriously damaged 1,700, killed 44 residents and injured 10,000 and racked up \$19 billion in costs.

New York had already started addressing the risks of climate change more than five years earlier, but Hurricane Sandy made resilience a more urgent and explicit thrust.

"A Stronger, More Resilient New York" was produced by the Special Initiative for Rebuilding and Resiliency that Mayor Michael Bloomberg convened immediately after the storm. The 445-page document catalogs numerous strategies to increase resiliency citywide ranging from strengthening coastal protection by regularly adding sand to beaches to launching a design competition to create homes with raised foundations and other defenses against flooding.

A second group, the Building Resiliency Task Force, delved specifically into making buildings more resilient to extreme weather conditions. More than half of the task force's 33 recommendations have already been enacted, says Cecil Scheib, chief program officer with

The goal is to keep buildings inhabitable as long as possible when services — especially power — are lost.

the U.S. Green Building Council of New York, which led the task force.

The goal isn't to merely keep buildings standing. It's also to keep them inhabitable as long as possible when services — especially power — are lost. "If people don't have to leave their buildings ... that will take a big strain off the recovery and relief efforts," Scheib says.

For example, many New Yorkers live in high-rises where water is pumped to upper floors "The single biggest recommendation adopted so far is to require buildings to have an emergency faucet in the building for residents to get water in a power outage," Scheib says. "During Hurricane Sandy, people had to leave their buildings because they ran out of water."

Hurricane Sandy tragically showed that storm surges are greater New York's greatest threat from extreme weather — a threat that will only grow as sea levels continue



(Above) Joe Potter and his mother Kate sit in front of what is left of their Springfield, Mass., home after the June 2011 tornado. (Right) Downtown Springfield, Mass. Photos by the Colorado National Guard

to rise. The south and east shores of Staten Island are especially vulnerable. Sandy's storm surge flooded 16 percent of the borough and killed 23 people — a higher death toll than all the other boroughs combined.

The Staten Island Board of REALTORS® (SIBOR) commissioned a study by the College of Staten Island to better understand the borough's vulnerabilities and explore how to make it more storm-resilient. The study recommends creating a levee district to build and maintain a six-mile levee funded by a local tax. The tax would be offset by a decrease in flood insurance premiums based on the additional protection provided by the levee.

SIBOR'S next step is to meet with the mayor's office to discuss the levy recommendation, says Sandy Krueger, CEO of the association.

"Sandy damaged or destroyed many homes in our community," says Krueger. "It's important from both a business and a personal standpoint that we play a part in helping prevent this from happening again."

Brad Broberg is a Seattle-based freelance writer specializing in business and development issues. His work appears regularly in the Puget Sound Business Journal and the Seattle Daily Journal of Commerce.



# SMART GROWTH and Resilience

- Mixed land uses Makes it easier for people to meet daily needs in the event of a regional disruption. Also lets people walk, bike or drive shorter distances in everyday life, reducing greenhouse gas emissions that contribute to climate change.
- Compact development Concentrates growth in existing areas, relieving pressure to develop open space and making it easier to protect areas vulnerable to flooding, wildfires, storm surge, or other impacts.
- Open space preservation Helps capture and absorb floodwaters, reducing flooding in developed areas.
- Transportation choices Enables people to continue to get to their destinations if a major transportation route is damaged. Also makes a community less vulnerable to economic impacts such as spiking gas prices by giving residents other options for getting around.
- Fair and predictable development decisions Helps ensure development fits a community's changing flood plains and weather patterns, keeping people and property out of harm's way. ■

Source: U.S. Environmental Protection Agency



# INCREASING SEA LEVELS

As sea levels rise, many coastal states rush to stem the tide

By Brian E. Clark

hen Jennifer Priest bought her house in Norfolk, Va., 15 years ago, she never thought she'd become a poster child for coastal flooding. But her modest rambler, in an

attractive neighborhood not far from the southern end of Chesapeake Bay, has been inundated three times in the past nine years due to storms, land subsidence and a rising sea. Fortunately, she has federal flood insurance which has covered at least part of her losses.

"I had no inkling when we purchased this house in 1999," said Priest, the mother of three and college fundraiser by profession. "It was built in 1951 and received two inches of water during Hurricane Hazel (in 1954). That was it, but things have gotten wetter since then."

Priest isn't alone. All up and down the East Coast — as well as along the Gulf of Mexico — rising sea levels and sinking land are causing major troubles for homeowners, cities, businesses, military bases and even wildlife refuges.

## Rising sea levels and sinking land are causing major troubles for homeowners.

Most climate scientists say the situation is only going to get worse, with predictions of ocean levels rising up to a meter over this century.

Ben Horton, a professor at the Rutgers University Institute of Marine and Coastal Sciences, called the problem "a great threat because the United States has so much property and infrastructure and population along the Atlantic coast. There are many examples of the effects of climate change, but the biggest financial impact is from rising sea levels, which have been increasing since we came out of the industrial revolution."

While 2012's Hurricane Sandy caused a huge amount of destruction to New York and New Jersey with its 13-foot tidal surge, Horton said increases in the base level of the ocean exacerbated the problems.

"You can never say one hurricane is caused by climate change, but you have to ask, how often will storms like Sandy occur in the future?" he asked. "Was it a once in a century event or will it be once in a decade?

"The impacts will be profound. If you look at what happened in 2012 and compare it to a hurricane with

# Climate-related sea level increases can cause massive problems for coastal areas.

a similar surge in 1821, it flooded about 100,000 square kilometers (37,000 square miles) more because the sea had risen 50 centimeters (19 inches.)"

Even without epic storms, Horton said climate-related sea level increases can cause massive problems for coastal areas because it increases frequent flooding, which causes erosion, contaminates drinking water supplies and aquifers, damages farmland and decreases habitat for fisheries, wildlife and plants.

"No one likes to hear it, but in the 21st Century, it's clear some people will have to abandon their homes," he said. "Low-lying coastal islands will be lost forever. We have committed to sea level increases due to the burning of fossil fuels. So what we are faced with now is how high do we want those levels to go and are we willing to mitigate and slow the high rates of sea level rise so we can adapt."

Horton, a native of England who came to the United States a decade ago and "fell in love with the Carolinas," said each coastal area has its own problems.

"The cutting edge of science now seeks to understand the regional impacts of sea level increases. If we take the U.S. coast line as a whole, the area that is most susceptible to sea level rise is the Mississippi Delta in part because of land subsidence. If you look at the instrumental records

of tide gauges, you'll see rates of around 10 mm (.4 of an inch) a year."

He said Florida is also very susceptible because it is coastal plane on a limestone bedrock base "that acts a bit like a sponge.

"So not only do we get troubles along the coastline, but we have problems on the interior. The sea level rise will have a big influence on its aquifer, and you'll also have the potential of huge ecological changes to the Everglades.

"Worse, most of Florida's population lives on the coast," he said. "Something like 80 percent of the state's economy is in these coastal counties. In 2010, the value of that built environment and infrastructure was some \$2 trillion. The rates of sea level rise in Florida are not as rapid as elsewhere, around 2 millimeters (less than .1 of an inch) a year, but it's happening."

Further up the Atlantic coast, Horton said Virginia is the "hotspot" because of land subsidence related to geological processing cause by a long-disappeared ice shield. That phenomenon, he noted, has nothing to do with global warming. But it will continue for thousands of years.

In the short term, he said cities are raising roads, fortifying sewer and water systems, building sea walls and reinforcing dikes. Some shoreline communities are putting in dunes to protect homes.

But to slow sea level increases — which are caused primarily by melting glaciers and the expansion of warming oceans — he said the rate of global temperature increase must be slowed. The only way to do that is to reduce



NASA Wallops Island Flight Facility on Virginia's Eastern Shore is experiencing major erosion issues near its launch pad and vehicle assembly buildings. The agency is working with the Norfolk District U.S. Army Corps of Engineers to extend a seawall about 1,500 feet to protect the launch pads at the southern end of the island, and place about 2.6 million cubic yards of sand along the beach to help protect the entire island from further erosion.



The last remaining house on Holland Island in the Chesapeake Bay. Originally developed by farmers and fisherman, Holland Island was home to nearly 400 residents. Rising sea levels have since covered the island and its development.

### Coastal flooding is a big threat.

the output of so-called greenhouse gasses, caused primarily by carbon dioxide emissions from industry, automobiles and other human activities, Horton said.

"You can adapt to regional threats with both hard and soft engineering approaches, he said. And while things like sea walls and tidal barrages are very effective, he said they are also "very, very expensive."

"And you can re-nourish the beaches," he said. But when sea levels rise, the coast retreats. "To balance that, you put sediment on beach. But that is only temporary. You keep on having to replenish it."

"Or you just retreat. Only the most valuable areas will have the economic wherewithal to be protected this way with hard engineering solutions. What New York City is doing is a classic example."

But Horton said not all shorelines will be saved. Some will be left to the forces of nature, he said.

In Delaware, the state is mulling options to fortify seven threatened beach communities from east of Dover to north of Lewes. Some taxpayers are questioning these plans, which could cost hundreds of millions over the next 30 years.

Nearly \$70 million would be needed to pump enough sand onto shorelines to protect the eroding beaches through the next decade, according to the Delaware Department of Natural Resources and Environmental Control. Over the next two decades, an attempt to stage an orderly retreat while still saving some houses and beachfront would cost another \$62 million or more, according to state estimates. If Delaware were to buy out the 451 most vulnerable owners along the seven shores, it would cost upwards of \$154 million over the next three decades.

And in New Castle, just south of Wilmington, Del., the community spent millions of dollars recently to fortify dikes built more than two centuries ago by Dutch and Swedish settlers to keep the ocean at bay.

"If you remove emotion from it, it's a simple cost-benefit analysis," Horton said. "That's where science needs to inform. You need to have best quality information telling you what the regional scenario will be. Then you can estimate what infrastructure will be affected and what areas will be flooded. You can then make decisions, because there are very different risks associated with the effects





of sea level rise on a home and an international airport or a nuclear power plant."

Though communities are making plans to protect their assets, Horton said many politicians are reluctant to deal with the long-term problem.

"While 98 percent of scientists believe climate change is real, politicians continue to question if global warming is real," he said. "Until they aren't influenced so much by special interest groups, and we have appropriate education so that the general public understands, change on a broad level won't happen. But younger people seem to be accepting that this is real, so there is great hope that the next generation will deal with this, perhaps through grass roots efforts.

"That's my hope. But the United States can't do it alone. While the United States and the developed world are responsible for most of the carbon emissions and sea level rise through the 20th century, the 21st Century will be controlled by other emitters like China and India. They are now producing more carbon than the United States, so there will have to be international cooperation."

In Norfolk, emergency response director Jim Redick said that while his city dodged the brunt of Sandy — which would have been "catastrophic" - coastal flooding is considered its biggest threat.

"The ocean is rising," said Redick, whose community got a Rockefeller Foundation grant to help with its planning. "I can see it on our streets with simple nuisance flooding on lunar high tides. We are looking at infrastructure projects to get funds to raise roads and considering flood walls and other gray and green strategies.

"At the same time, my shop is trying to get FEMA grants to elevate properties with the understanding that even though the home may be elevated, it could be an island if the streets are underwater."

Redick, who is a member of Virginia's Secure Commonwealth Commission, said the city is considering building a sea wall, but the price tag is more than \$1 billion. "And that is certainly more than one locality can afford. So we are trying to come up with a state strategy so every community isn't fighting on its own for federal dollars."

Redick said the commission has not argued about the cause of sea level rise. "It's not become a controversial political issue. We know it's occurring. For me, it's kind of like putting out a fire first. Then we can find out what's the cause. Which is why I think it's a good thing the governor is re-establishing his commission on climate change. Someone needs to focus on the 'why,' too."

Redick said rising insurance rates for homes near the water may force some people to move. He also said he believes if the city has to retreat from some areas, homeowners and businesses should be compensated for their losses.

William Lucks, who served on Delaware's Sea Level Rise Advisory Committee, agreed and said "as a member of the Delaware Association of REALTORS®, working to protect private property rights, yes I do agree with the compensation."

Meanwhile, Jennifer Priest is content to hunker down and enjoy her Norfolk home for as long as she can.

"I don't know how easy it would be to sell this place as prone as it is to flooding now," she said with a wry laugh. "Besides, I like where I live. So I'll just make sure my insurance agent's email and cell number are up-to-date. I've dealt with him the last two times. Fortunately, he's a lovely man."

Brian E. Clark is a Wisconsin-based journalist and a former staff writer on the business desk of The San Diego Union-Tribune. He is a contributor to the Los Angeles Times, Chicago Sun-Times, Milwaukee Journal Sentinel, Dallas Morning News and other publications.

## Rising insurance rates for homes near the water may force some to move.

Elizabeth River Wetlands Restoration project in the city of Norfolk, Va., consists of two stone breakwaters to create a protected area for nearly an acre of wetlands restoration and the construction of a check dam at the mouth of the stormwater canal to control sedimentation.

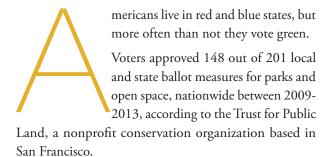
Courtesy of the USACE





# **Conserving** AMERICA'S LAND

By Brad Broberg



The 74 percent success rate reflects a national green streak dating back to President Theodore Roosevelt, who got the modern conservation movement rolling by putting 230 million acres under federal protection — highlighted by the creation of five national parks.

"Land conservation is a core value of the American people regardless of whether people live in a red state or a blue state or a yellow state or a purple state," says Lawrence Selzer, president of The Conservation Fund, a nonprofit environmental organization based in Arlington, Va.

The challenge, however, is becoming more complex. Preserving pristine wilderness areas remains important, but protecting green space where people live is also a big part of today's conservation agenda.

"If you asked Teddy Roosevelt why he did it, he would say it was for nature and wildlife. Keeping people out was



### Land conservation is a core value of the American people.

the goal," says Rand Wentworth, president of the Land Trust Alliance, a national network of land trusts based in Washington, D.C. "Now, our goal is to invite people in."

Conservationists have their work cut out for them. The U.S. population is projected to grow from 250 million in 1990 to a projected 420 million by 2060. Development will need to keep pace, putting continued pressure on unprotected forests, farms and wetlands that provide habitat, produce food, offer recreation and perform valuable ecological services such as flood control.

An average of 1.5 million acres of land per year was newly developed in the United States between 1982 and 2010, according to the latest National Resources Inventory published by the United States Department of Agriculture. That works out to 43 million total acres — or an area roughly the size of Missouri.

# Protecting green space where people live is a big part of today's conservation agenda.

In the face of limited government support, the challenge for conservationists is to add as much or more land to the preservation rolls as is being bulldozed. A 2011 report by the Land Trust Alliance indicates they are succeeding. "What we learned was breathtaking," Wentworth says.

According to the National Land Trust Census, state, local and national land trusts conserved 10 million acres from 2005 until 2010 — an average of 2 million acres a year.

The total number of acres conserved by the nation's 1,700 land trusts grew from 24 million in 2000 to 37 million in 2005 to 47 million in 2010, making them the most dynamic force for land conservation in the United States today. While land trusts were adding 10 million acres to the preservation rolls between 2005 and 2010, the Land Water Conservation Fund (LWCF) — the largest source

of federal funding for conservation acquisition — was adding 675,000 acres.

Land trusts are nonprofit organizations that work to acquire and preserve open space or obtain conservation easements. The easements keep land in private ownership but restrict how it can be developed so forests, farms and fields don't become subdivisions, shopping malls and office parks.

In some cases, owners donate the land or easement, but land trusts also buy land and easements. In addition, they manage some of the land they protect, identify open space needs and advocate for plans and policies that support conservation.

Land trusts depend on private donations for their operating costs, but funding to purchase land and easements comes from a mix of private and public sources, ranging from individuals and foundations to local and state ballot issues and some government grants.

Whether land trusts have been able to sustain the pace they set between 2005 and 2010 won't be known until the next National Land Trust Census comes out in 2016.

(Right) In 2013, the conservation of Preservation Ranch, now known as Buckeye Forest, marked a significant moment in Northern California forest conservation. More than a decade ago, The Conservation Fund set out to reassemble what was once a single forested property stretching nearly 30 miles along the rugged North Coast range. Over time, this land was divided and sold into multiple parcels, including Preservation Ranch. Much of the forest was slated for development or conversion to other uses. With the purchases of the Garcia River Forest in 2004 and the adjoining Gualala River Forest in 2011, the Fund began sustainably managing these historic forests before they were forever lost to non-forest uses. The Buckeye Forest acquisition completes the efforts to reunite the larger forest.



The Conservation Fund forester Scott Kelly measuring a tree in its Gualala River Forest.



"We don't know (what happened) in 2011, 2012, 2013," Wentworth says. "My guess is there was a slowdown in conservation just like there was a slowdown in real estate, but everything I'm hearing now is that it's back up again."

Acquisitions account for roughly one-third of the land being conserved in the United States, according to the Trust for Public Land. The rest is being conserved through conservation easements obtained by land trusts as well as local, state and federal government.

"Conservation easements are without question the fastestgrowing segment of the environmental movement and they seem to be one of those things that are not polarized by politics," Wentworth says.

Congress enacted an enhanced tax incentive in 2006 for landowners who donate conservation easements. The incentive expired in 2013, but appears to be headed to an extension after gaining bipartisan approval from the Senate Finance Committee this spring. In addition, more than 200 senators and representatives have co-sponsored legislation that would make the incentive permanent.

That's not the only positive conservation news coming out of Washington, D.C., lately. The new five-year Farm Bill contains more than \$1 billion for purchasing farmland conservation easements. "What makes it interesting was that everything else in the Farm Bill was cut and (conservation easement funding) was sustained at historic levels," Wentworth says.

President Obama gave conservationists something else to cheer about by fully funding the LWCF in his proposed 2015 budget. The money for the LWCF comes from a sliver of the royalties from offshore oil and gas development. Although authorized to receive up to \$900 million, the LWCF hasn't been fully funded since 1998. Over the last six years, appropriations have ranged from \$275 million to \$450 million.

The Friends of the Silvio O. Conte National Fish and Wildlife Refuge is among the many conservation groups urging Congress to fully fund the LWCF. The refuge, which lies within the Connecticut River watershed, isn't just home to fish and wildlife. It's also home to 2.3 million people in four New England states.

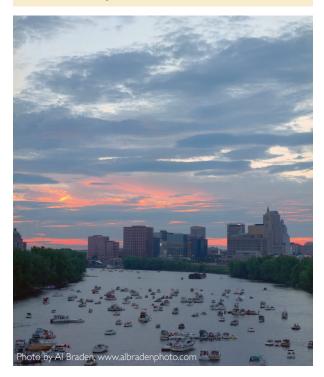
About 38,000 acres of the watershed's 7.2 million acres are preserved through acquisitions and conservation easements that provide habitat, control flooding and support

## Conservation easements are the fastest-growing segment of the environmental movement.



The Conservation Fund's current project in Atlanta is the Lindsay Street Park. This will be the first park in one of Atlanta's most challenged neighborhoods — English Avenue. The new park will be more than just a nice open space in the city. The project will have measurable economic impacts for these residents throughout its construction and management, including workforce training and temporary jobs. Volunteers from the Blank Family of Businesses rolled up their sleeves with The Conservation Fund and community members to clean up and prepare the park site for construction later this spring.

The boats on the Connecticut River are waiting for the 4th of July fireworks show to begin in Hartford, Conn.





### REALTORS® don't just sell houses, we sell communities and quality of life.

the ecological health of the overall refuge. The Friends of the Conte are asking the LWCF to provide \$5 million in 2015 to acquire 8,400 additional acres to protect forests, wetlands and streams.

"Land is more expensive here per acre than other places, but you get a lot more people interacting with nature close at hand," said Andrew Fisk, executive director of the Connecticut River Watershed Council.

If conservation dollars don't stretch as far in a place like the Conte Refuge as they do in less populated areas, that's OK, because connecting with people matters as much or more as preserving the maximum amount of land per dollar, Wentworth says.

"That's an emerging trend in our field," he says. "More and more we're talking about not all acres are created equal."

With more than two million people, King County, Wash., is one of the most populous counties in the country. The Trust for Public Land worked with the county to save 226 acres of forest from being clear cut and possibly turned into exurban estates. The trust bought the property and held it until voters approved a parks and open space levy in 2013 that included funding to purchase the land to protect wildlife habitat and expand a regional trail system. The Seattle King County REALTORS® endorsed the parks levy. "As REALTORS", we don't just sell houses, we sell communities and quality of life," said Sam Pace, a broker with Executive Real Estate in Bellevue, Wash. "Great communities require us to step up and make strategic investments ... in things like great schools, transportation systems that work and amenities such as parks," he said.

Another example of conservation close to home is the Nashville Naturally Open Space Plan. Created in 2001 by the Conservation Fund on behalf of the city of Nashville,



### Development patterns are starting to take into account the value of preserving green space in and around a community.

the plan aims to preserve 22,000 acres of open space throughout Davidson County by 2035.

Tennessee has one of the highest rates of obesity in the country. The need to improve the health of Nashville residents helped drive the Nashville Naturally plan, which will expand opportunities for residents to bike, walk and play. Highlights to date include adding 33 miles of greenway trails and acquiring 1,336 acres of land to connect a series of existing parks.

Despite many successes, conservationists alone can only do so much to preserve land in the face of continued population growth.

"The preservation community is very active, but the development community will have a huge impact going forward," says Will Rogers, president of the Trust for Public Land.

The good news, Rogers says, is that development patterns are starting to take into account the value of preserving green space in and around a community. "There's definitely a change in the wind," he says. "There's more people letting the land speak for itself ... and that really comes out of the smart growth movement."

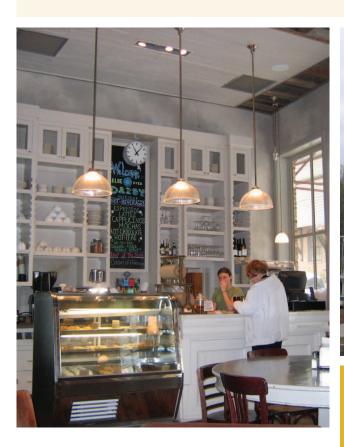
Serenbe, a master-planned community in Chattahoochee Hills outside of Atlanta, shows what's possible. Less than one-third of the 1,000-acre property is slated for development. The rest will remain green space.

Like the rest of Chatahoochee Hills, Serenbe is zoned for one house per acre, but a transfer of development rights (TDR) ordinance provides a way to cluster development in designated areas and preserve green space without reducing the overall number of



Serenbe, pictured here, is a 900-acre community about 30 minutes west of the Atlanta airport.







## We all had to think bigger than ourselves and work together as landowners.

housing units that can be built in any given development. In Serenbe's case that means 1,000 homes.

Although most lots in Serenbe are small, 98 percent of the home sites abut trails and green space, adding a 10 to 30 percent premium to the sales price of homes, says Garnie Nygren, director of operations. "We can make a lot more money doing this than if traditional development had occurred," she says.

Serenbe is the first new community to be built in Chattahoochee Hills. The key for Serenbe's developers was to rally support from other Chattahoochee Hills landowners for a new land use plan for the entire area — including the TDR ordinance — in order to maintain the area's rural character while still allowing development.

"We all had to think bigger than ourselves and work together as landowners," Nygren says. Otherwise, Serenbe would have become "a 1,000-acre island in a sea of subdivisions."

Brad Broberg is a Seattle-based freelance writer specializing in business and development issues. His work appears regularly in the Puget Sound Business Journal and the Seattle Daily Journal of Commerce.



# AMERICAN

# FARMS

Preservation programs across the nation are helping to protect farmland from development

By John Van Gieson

armland preservation programs sustained a prolonged funding drought during the Great Recession, forcing many to cut spending on protection of farms threatened by development. Now preservation funding is coming back, but so are post-recession development pressures that threaten to overwhelm farms from New England to the West Coast.

"It's cooled a little bit in recent years, but certainly that development pressure is always there," said Hope Gruzlovic, policy and communications manager for the New Jersey Agriculture Development Committee.

"Being in a state like New Jersey that's densely populated ... I think it lends more urgency to our efforts to preserve farmland," she said. "That's why we've seen the public has consistently supported funding for farmland preservation and open space preservation because they think that's important and we only have a limited time to do that."

The American Farmland Trust (AFT) reported earlier this year that funding of farmland preservation programs is down 39 percent since 2008.

"State budget cuts have hit agricultural land protection programs hard in the last five years, but our latest survey shows a very significant 19-percent increase in funding from 2011 to 2012," said Andrew McElwaine, president and CEO of AFT.

"But if states had committed the same level of funding they had in 2008, we would have saved an additional 358,000 acres of agricultural land and purchased 2,000 additional farmland conservation easements," he said. "That's the gap AFT is working hard to narrow with our state partners."

The question for farmland preservation advocates is whether funding for their programs will be sufficient going forward to prevent an accelerating loss of farms to development.

"While there is some optimism in our survey, the United States has been losing one acre of farmland every minute to development," McElwaine said. "In the face of a global need to double food production by 2050, that is unacceptable. We believe state, local and national governments







Sunflowers on the Kanach farm in East Amwell Township, Hunterdon County.
The New Jersey township purchased the development rights to the farm in 1999.

must step up to the plate and do more to protect land and keep farmers farming."

Between 2002 and 2007, according to the U.S. National Resources Conservation Service, more than 7.5 million acres of prime farmland, an area the size of Maryland and Delaware, were converted to non-agricultural uses.

The states, local government and nonprofit trusts, supported by federal grants, have spent a total of more than \$5 billion to preserve more than 5 million acres of farm and ranch land since the farmland preservation movement took off in the late 1970s, according to AFT. The federal Farm and Ranch Protection Program (FRPP) contributed about \$1.1 billion of that total, and 75 percent of the area it preserved was ranchland, not farms.

State, local and national governments must step up to the plate and do more to protect land and keep farmers farming. In most of nearly 30 states that buy conservation easements from farmers, however, the amount of farmland that has actually been protected from development is modest. The leading states in the percentage of farmland protected from development are: New Jersey, 29%; Delaware, 21%; Maryland, 18%; Massachusetts, 13%; and Vermont, 11%.

"I think the South is lagging behind," said Jennifer Dempsey, director of the AFT Farmland Information Center. "I think the Corn Belt may be worse."

Another factor clouding the future of farmland preservation is uncertainty about funding for, and the direction of, federal protection programs. In this year's Farm Bill, Congress consolidated existing farm and ranch, wetland and grassland protection programs into a new entity. Cuts in federal spending on the consolidated program are considered likely.

"It's too bad that there may be less money available to invest in farmland protection," Dempsey said. "It's also not clear what will happen with the new consolidated program."

She said advocates fear the new federal approach could divert funding from preservation programs that keep farms in protection to wetlands preservation, which takes land out of production.

The federal government budgeted about \$150 million for the FRPP last year. The federal program has provided funding to help purchase more than 4,200 conservation easements, protecting more than 1.1 million acres.

## Government programs and nonprofits offer farmers a variety of tools to preserve the land they farm.



agricultural land preservation easement

the farm market. Homestead Farm is preserved through Maryland's Agricultural Land Preservation Foundation



A substantial portion of that land, however, is ranchland in Colorado, Wyoming and Montana.

Officials of some local farmland preservation programs say they want no part of the federal program.

"The federal programs are relatively the new kids on the block, and they want to push their weight around," said John Zawitoski, who runs the Montgomery County, Md., farmland preservation program. "They want to tell the counties who have been doing it for 30 years how to run their program. We don't rely on any federal funding."

Government programs and nonprofits offer farmers a variety of tools to preserve the land they farm, including lower property taxes. Advocates say the most effective programs are based on paying farmers to farm — not develop — their land.

Usually run by county governments or land trusts, farmland preservation programs negotiate conservation easements with farmers. That is known as purchase of agricultural conservation easements or PACE. Conservation easements obligate the owner and subsequent buyers to keep the land in production forever.

Many preservation programs rely on transfers of development rights (TDR), buying the rights to develop the land from the farmers who own it. A number of those programs allow farmers to sell their rights to developers who transfer those rights to other properties they are developing under conditions set by local officials. Developers frequently use those rights to increase housing density at their projects.

The highly-regarded farmland preservation programs in Lancaster County, Pa., and Montgomery County, Md., illustrate how PACE and TDR work.

Lancaster, located in the Pennsylvania Dutch country about 60 miles west of Philadelphia, has preserved about one-quarter of the 400,000 acres of farmland in the county.

Preservation programs rely largely on purchasing conservation easements from farmers.

## Since Montgomery County launched its preservation program, it has preserved 93 percent of all its available farmland.



"We still have 75 percent left to do, as we like to say," said Karen Martynick, executive director of the nonprofit Lancaster Land Trust

The Trust and the county's Agriculture Preservation Board run the preservation programs in Lancaster County. Both rely largely on purchasing conservation easements from farmers who agree to protect their land from development.

"The farmer gets a payment and then the development rights are in effect extinguished on the property," said Tom Daniel, a planning professor at the University of Pennsylvania and former director of the Lancaster County program. "The farmer can use the property for farming, but he can't put up a hotel or a Walmart."

Farmland preservation programs typically rely on a point system assessing factors such as soil quality and proximity to urban areas to determine which farms rise to the top of the purchase list.

"The most significant reason for the preservation program in Lancaster County is because Lancaster County has the best soil in the country," Martynick said. "It's the number one non-irrigated soil in the country."

She said the Trust was created in 1988 to work with Amish farmers in the county to preserve their land.



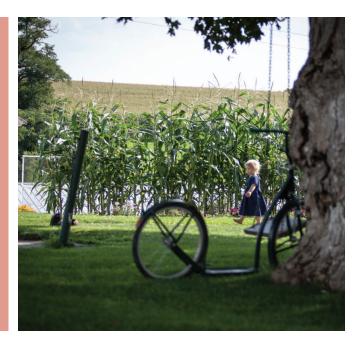
Martynick said the county pays up to \$4,000 per acre for conservation easements, but the Trust is limited to payments of \$1,000 per acre.

Why would Amish farmers accept payments of \$1,000 per acre from the trust when they could get four times as much from the county?

"They're obviously not doing it for the money," Martynick said. "They're doing it because they care about the land. They don't like to deal with government. The other part of it is the county has a long waiting list."

Montgomery, a suburban county north of Washington, D.C., in Maryland, has a rich agricultural heritage, but is also the 10th richest county in the country in terms of median income, according to a recent survey.

Since Montgomery County launched its preservation program in 1978, Zawitoski said, it has preserved about 73,000 acres of farmland, about 93 percent of



## **Encouraging young families** to go into farming is an ongoing issue for farmland preservation programs.

all available farmland, or approximately 23 percent of all land in the county.

He said farmers typically negotiate the sale of development rights to developers before they apply for conservation easements from the county. The financial rewards can be substantial for farmers who transfer their development rights, Zawitoski said.

On a hypothetical 100-acre farm, he said, the farmer would likely get \$400,000 from transferring development rights to a developer and \$700,000, about \$7,000 an acre, from the county.

"At end of the day he still owns that farm, and it doesn't prevent him from selling that farm in the future to a guy who still wants to farm," Zawitoski said.

He said he showed a farmer who was considering developing his 352-acre farm that he could make a lot more money by transferring his development rights and continuing to farm the land.

"He said, 'I'm a born again conservationist. Where do I sign on the dotted line?" Zawitoski said.

Montgomery County raises funds to pay for the preservation program by imposing a 5 percent tax on the sale of farms taken out of agricultural production.

"There's not that much land left that's going to convert, so we've had to go after things like alternative revenue sources," Zawitoski said.

A Farmland Information Center study of the federal FRPP confirmed that most farmland protected from development through use of conservation easements stays in farming. The study reported that 96 percent of landowners said at least some of their protected land was in production and nearly half said they were growing crops on all of their protected land.

It said 84 percent invested proceeds from the sale of easements on either farm operations or buying additional land to farm. "Easement proceeds spent on agricultural purposes tended to be spent locally, bolstering the entire agricultural sector in communities with protected farms," the study said.

Selling conservation easements does not, however, mean that the land must be farmed, and that can be a problem for programs intent on keeping farmland productive.

"People were investing in a beautiful farm in Vermont, but not necessarily for farming," said Nancy Everhart, agriculture director for the Vermont Housing and Conservation Board. "We were looking around for other tools to incorporate into our easements."

If a Vermont farmer wants to sell his or her land to an easement buyer who does not meet the Internal Revenue Service definition of a farmer, the state has the option to buy the property for its agricultural value.

"The goal for us was to create an incentive for farms to stay in farm ownership," Everhart said.

Keeping farms in the family after the patriarch dies, helping operators buy the farms they lease and encouraging young families to go into farming are ongoing issues for farmland preservation programs.

Purchasing conservation easements from farmers helped to accomplish all three of those goals in Kane County, Ill., about 60 miles west of Chicago, said Janice Hill, the county's farmland protection manager.

"If only one member of the family wants to continue farming after the death of the patriarch, he or she can

sell a conservation easement to raise funds to pay the other children for their interest in the land," Hill said.

"One of the things that's exciting in Vermont is the number of farms is actually growing; more young people are going into farming," Everhart said.

In addition to buying easements, the New Jersey program focuses on helping farmers find markets for the food they grow.

"It's not just enough to preserve farmland, we need to make sure farmers can be successful on it," Gruzlovic said. "To be successful they have to have markets."

Hundreds of land trusts all over the country participate in farmland preservation programs, but most are small and many rely on donated land, not purchases of conservation easements. Most of the land preserved in trusts is ranchland in the West.

The Farmland Information Center released a survey reporting that 52 trusts preserved 95 percent of the land protected by trusts.

One of the major nonprofits, the Trust for Public Land (TPL), has preserved 86,000 acres of farms and ranches in 15 states. TPL received \$35 million in federal FRPP grants and \$45 million from other sources, largely state grants, to purchase conservation easements.

In Colorado's Upper Arkansas Valley, TPL worked with local trusts to preserve the 700-acre Hutchinson Ranch, which has been owned by members of the same family for six generations, since the 1860s. The Hutchinson Ranch was one of the last working cattle ranches in an area becoming popular for second homes. Today, the Hutchinson family has planned conservation easements that permanently protect 650 acres and that allow the family to continue working the land, while ensuring it can never be subdivided or fragmented.

"Overall I think we are pretty optimistic," said Tim Ahern, TPL communications director. "Farmland preservation over the years has been pretty popular with the public because it's good for the land and it's good for the farmers."

John Van Gieson is a freelance writer based in Tallahassee, Fla. He owns and runs Van Gieson Media Relations, Inc.

## It's not just enough to preserve farmland, we need to make sure farmers can be successful on it.

Burlington County, N.J., purchased this farm in Moorestown and Mount Laurel for preservation in 2005, and operates it as a working farm and community agricultural center that offers a tailgate farmers market, community gardens and special events, programs and other activities fostering public awareness of, and support for, local agriculture.







is part of 1,900 acres of farmland and open space in Monmouth, Mercer and Burlington ty, including 847 acres of farmland, was preserved by the State Agriculture Development Committee, the Green Acres Program and local and nonprofit preservation partners.

# How is California's Planning Shakeup



# Shaking

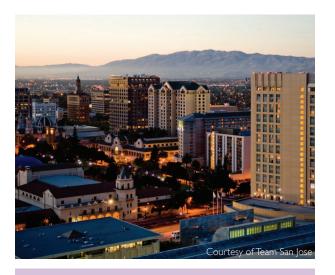
It's been six years since California passed SB 375 requiring transportation and land-use planning to be coordinated. Preliminary results have many encouraged.

By G.M. Filisko

alifornia is much the same, and yet entirely different, six years after it enacted the Sustainable Communities and Climate Protection Act of 2008, or SB 375.

"The results of this California experiment are only going to be known over time because land-use and transportation decisions, including the decisions people make about where to live and work, don't change overnight," says Richard Lyon, senior vice president of public policy at the California Building Industry Association in Sacramento, which supported the bill. "We have to go through at least one round of planning, each of which takes eight years, before we'll be able to get data about how this is going to change decisions and activities in the real world."

Yet the ground has shifted in ways that aren't easily measured. "It's been a game changer in terms of how planning for both land use and transportation has



SB 375 has been a game changer in terms of how planning for both land use and transportation has been accomplished.

# The idea is to slash GHG emissions by developing more sustainable communities.

been accomplished," contends Garth Hopkins, chief of the office of regional planning for the California Department of Transportation in Sacramento.

Challenges remain in the implementation of SB 375, and the outlook is nearly impossible to predict. But many are heartened by early results.

#### The complexities of SB 375

SB 375 is fairly straightforward on its face. But its implementation is intertwined with other California laws that make it more intricate.

The law's goal is to reduce the state's greenhouse gas emissions for cars and light trucks as required under the state's 2006 Global Warming Solutions Act, or AB 32. SB 375 requires the state's metropolitan planning organizations, or MPOs — which plan and allocate funds for transportation investments — to develop regional transportation plans, or RTPs, that include a sustainable communities strategy, or SCS, to help the region meet Green House Gas (GHG) emission targets. SB 375 also requires the California Air Resources Board to provide each MPO with an emission target for 2020 and 2035 and to update those targets every eight years.

The idea is to slash GHG emissions by developing more sustainable communities, and that's achieved by yoking transportation planning with land-use planning in a way that's typically not done. Transportation planning primarily occurs at state and regional levels, while land-use planning is governed by local officials. SB 375 forces the two groups to work more closely together.

The aims of SB 375 mirror national trends. "The law didn't come out of thin air," says Mike McKeever, executive director of the Sacramento Area Council of Governments. "It's responsive to trends already well along in both the market and the policy and regulatory structure of our state and local governments. I'd describe those as providing more diverse housing options and more diverse transportation options. The law was intended to nudge that process along."

Miriam Chion, planning and research director for the Association of Bay Area Governments in Oakland, Calif.,





People are making different choices about where they live and work.

agrees. "The law addresses a trend that's been unfolding in the region but more forcefully in the last 10 to 15 years," she says. "People are making different choices about where they live and work. There's a shift from the suburban home to the house or apartment close to coffee shops, restaurants, clubs and community centers. What we started doing as a regional transportation authority as SB 375 kicked in was to determine how we address these needs."



To accelerate change, California also adopted a streamlined review process for infill development projects. "We included in SB 375 an incentive for builders to use land in a more efficient way," says Lyon. "We have the California Environmental Quality Act, and every project has to go through CEQA review. But if you're building in accordance with densities established by local communities — it's not just for high-density development because a variety of different housing types are compliant with SB 375 — entitlement can be more streamlined. You should be able to move forward with a reduced amount of regulatory review."

### A whole lotta planning going on

Planning has been paramount in SB 375's implementation. "California has 18 MPOs in the urbanized areas of the state," says Hopkins. "Seven have adopted RTPs that incorporate SB 375."

All 18 should have their RTP completed by early 2016, predicts Hopkins. However, the four largest regions are done. "Los Angeles, Sacramento, San Diego and the Bay area, which comprise 88 percent of the state's population, have completed their first round of plans," says McKeever. "These RTPs get updated every four years, and two of the four regions are already working on their update, and we're one of those. We're not focusing on revisiting the main elements but on implementation and things we can do to re-arm ourselves to do it well."

How did the MPOs do with their RTPs? "It's not been an even implementation of SB 375," says Ethan Elkind, author of "Railtown: The Fight for the Los Angeles Metro Rail and the Future of the City," who holds a joint appointment as associate director of the climate change and business program at the UCLA and UC Berkeley schools of law. "First out of the gate was San Diego, and it was a pretty weak plan. It was able to meet GHG targets because of the recession and because commuting has been down. They sort of complied with SB 375 but not really."

After its RTP was released, the San Diego MPO (Sandag) was sued by environmental groups, a lawsuit later joined by the state's attorney general. In December 2012, a trial judge found Sandag's plan flawed, and the MPO is appealing.

"The lawsuit isn't an SB 375 lawsuit," explains McKeever. "Sandag has been sued under CEQA for many of its past RTPs. What I focus on is what's actually in San Diego's plan. They're projecting that 80 to 85 percent of new housing construction over the next two to three decades will be attached housing of some kind. That's a pretty big change from their last plan. They didn't draw a lawsuit from the development industry. I don't think there's a lot of controversy in the private market that believes that's where the market needs to go and is going."

The Los Angeles and Bay area RTPs got better marks. "A lot of people feel those plans were good and had innovative things in them," says Elkind. "Los Angeles shifted funds more to bike and pedestrian infrastructure. The Bay area plan also shifted dollars to those and created a grant program. It's not a huge amount of money, but it did encourage local governments to apply for grant funding for pedestrian and bike projects."

### Coordination is growing

The joint planning envisioned under SB 375 is happening. "Historically, transportation and land-use planning were done in silos," says Hopkins. "This integrates them to a level in California I haven't seen before, and it's a good thing. We're seeing RTPs starting to look at how land use does have an impact on transportation. It requires them to work more closely with cities and counties."

However, SB 375 clearly states that land-use authority remains at the city and county levels. "They're the authorities, and the state doesn't have much authority what gets built where," Hopkins explains. "MPOs don't have that authority, either. So they have to work with cities and counties on where growth would best take place,







and it's through more compact, infill development. MPOs have been pretty successful in looking at how that newer development can take place and seeing how transportation improvements can benefit it."

Chion, whose organization adopted in July 2013 the region's Plan Bay Area RTP, agrees SB 375 has prompted more coordination. "Until a few years ago, we didn't have regional planners assigned to work with a specific city," she explains. "We had a few people who'd coordinate across the board and answer questions as needed. Now we have five regional planners who have specific geographic assignments, and they work directly with planning directors to coordinate and support development of local plans linked to Plan Bay Area."

Involving more officials in planning has brought a predicable outcome. "One challenge is sorting out the roles," says Steve Sanders, program director for sustainability/ land use and healthy communities at the Institute for Local Government in Sacramento. "Regional agencies have had to step up and take more of a leadership role about regional development, and that's been turf controlled by cities and counties. There's been spark around that, and people are experimenting on how to do it."

There also isn't universal buy in. Many in the Los Angeles area "still think we're a region of the 1960s and 1970s," says Hasan Ikhrata, executive director of the Southern California Association of Governments. "A lot of work will have to be done, but it'll be easier to bring them along because of facts on the ground. Millennials and seniors are going to demand different housing and transportation. We know the future is going to be different. Can we convince our elected leaders? Our leadership's still not there."

There are also laggards in the Bay area. "Is everybody embarked on creating places that have a confluence of services near housing?" asks Chion. "Of course not. Some places will remain exactly as they were 10 and 20 years ago. However, the conversation about creating this vital urban neighborhood is a lot more intense than it was seven years ago."

Regional Transportation Plans are looking at how land use does have an impact on transportation.

### Regional governments will need a sustainable source of funding for implementation.

Places like Oakland, San Francisco and San Jose have been working on this transformation, says Chion. Others like Dublin, Walnut Creek and Mountain View have joined the discussion.

"If you go to Redwood City and smaller places like Vallejo and Petaluma, there's a lot of thought and effort to shape this," says Chion. "SB 375 has made a difference. It has facilitated coordination at the local and regional level. It's a shift, and it's creating a lot of commotion among developers, real estate folks and investors. There are a lot of adjustments at the local planning level. What SB 375 has done is given us a framework that allows us to organize the work we need to do with some clear orientation on how we proceed."

### **Funding falters**

Another monkey wrench in SB 375 implementation is funding. "The biggest challenge is that if you look at the list of findings in SB 375, it says local and regional governments will need a sustainable source of funding for implementation," says Bill Higgins, director of the California Association of Councils of Governments in Sacramento. "Since the adoption of SB 375, we went through the economic crisis. Leaders had to make some dramatic budget changes in California, and that included eliminating one tax increment financing tool local governments had to support infill development. The investment so far hasn't followed the plan on the state level."

In 2010, California adopted the Sustainable Communities Planning Grant and Incentive Program to facilitate implementation of SB 375. But the need outpaces resources. In the Los Angeles region, SCAG's grant program offered funding for cities with new ideas to link land use and transportation. "We were expecting 10 to 15 cities, and more than 50 wanted to participate," says Ikhrata. "This is a small-scale example of people wanting to do it, and funding is an obstacle. If we provide resources for cities and counties, we're going to move faster."

And then there's the muddled housing market. "You're trying to do this at a time when public-sector revenues are declining, so how do you pay to figure out what to

do and how to implement it?" asks Sanders. "And, oh yeah, you may also have heard we had a housing crash?"

Lyon agrees the housing market has affected SB 375 implementation. "We've had a severe housing crunch, and 2009 was the bottom of the market," says Lyon. "We've seen some steady but modest growth in new construction since then. But there hasn't been that volume of growth over that sustained period of time to evaluate how it's working. For it to work, you have to have fuel in the engine. We haven't had that for the last several years."

### Wins, losses and what to expect

In addition to coordination, Elkind sees other wins. "SB 375 syncs up the state's affordable housing requirements with transportation planning," he explains. "In the







# SB 375 encourages new versions of rail and money spent to make local streets higher-quality places more attractive to development.

old days, there was no penalty for areas that didn't want to comply with state law to meet affordable housing requirements. Now they're not eligible for certain transportation dollars from the regional entity. So it creates a hook for local governments to zone more for affordable housing."

"But I don't see SB 375 as having a major effect on the ground," concludes Elkind. "It's really just an incentive-based planning exercise. If regions want to go with it, there are things they can do. But it doesn't fundamentally change the fact that many of these decisions are under local control. It includes targets, but there's no legal penalty if you don't meet them."

Sanders remains positive. "We're changing a well-honed system and broadly expanding the set of folks involved



in the decision-making process," he says. "If you look super close, you'll see lots of bumps in the road. There's disagreement over things like whether there's enough attention to social equity or too much to environmental protection. But if you step back and see we're trying to shift a very established set of relationships and processes, it's doing about as well as can be expected."

What will be the signs in, say, 10 years, that SB 375 is working? McKeever will look for a strong move toward more multifamily development, both rental and owner-occupied, in the range of 20 to 25 units, rather than 5, per acre; transportation options that go beyond traditional highway capacity, with new freeways created as tollways along with the ability to carry more high-capacity vehicles like buses; new versions of rail; and money spent to make local streets higher-quality places more attractive to development and safer for cyclists and pedestrians rather than easier for motorists to sail through.

Ikhrata considers the goals of SB 375 "a great mission," and he's asked about it often when he travels to meetings of groups like the National Association of Regional Councils. "They want to know about our experience and how they can also be effective," he says. "Other regions are doing this even though requirements aren't formalized in a law, from cities like Chicago and Cleveland to states like Oregon and Washington.

"Whether we like it or not, the future is different," says Ikhrata. "One response is to ignore it until it's here. Another is to plan for it. The kind of planning SB 375 embodies will become a national standard. You can't sustain communities by continuing to develop beyond their boundaries and expecting you'll have the resources to provide things like water, energy and schools. This is a national discussion we must have, and SB 375 has started that. Are there obstacles? Of course. No major change in the world ever happened without doubting and discussion. But we're on the right path forward."

G.M. Filisko is an attorney and freelance writer who writes frequently on real estate, business and legal issues. Ms. Filisko served as an editor at NAR's REALTOR® Magazine for 10 years.





# ACTIVE TRANSPORTATION

Communities increase walking and biking with targeted strategies

By Christine Jordan Sexton

onnectivity.

It's the term used to describe the degree of connectedness within a transportation network.

For traffic engineers, city planners and developers, connectivity is measured

by intersections between streets, roads and rails. The better the connectivity, the more accessible and less isolated a community can be. The less connected community is more isolated and less accessible.

More than ever, accommodations for bike lanes and sidewalks are being included in the push for connectivity as the number of people riding bikes and walking — whether it's to work or to play — increases.

Two surveys, which both show increased walking and biking statistics, track Americans' modes of transportation: the National Household Travel Survey and the American Community Survey.

The American Community Survey only tracks trips to work. The 2012 survey shows that 0.61 percent of commuters report that they rode their bike to work. While it's not a whopping percentage, the figure is a 9 percent jump over 2011 when 0.56 percent of those who commuted reported using their bikes. And it's a 61 percent jump from the number of commuters who reported using their bikes in 2000.

The 2009 National Household Travel Survey (NHTS) tracks modes of transportation for all travel, whether to work

Accommodations for bike lanes and sidewalks are being included in the push for connectivity as the number of people riding bikes and walking increases.

or a trip to the in-laws. Recent NHTS data indicates that 1 percent of all trips taken in the United States are made by bicycle and 10.4 percent are by foot. Large cities — those with populations of more than 200,000 — have slightly higher rates than the national average — with 1.2 percent of trips made by bike and 12.7 percent of trips by foot.

By all indications, active transportation is on the move. With proper planning, increased advocacy and safer traffic environs, biking and walking are picking up speed.

#### Culture shift

"The environment today is way different than it was 25 years ago," said Morristown, Pa.,-based landscape architect Peter Simone, who has 40 years professional experience. "If you talked about bikes (with the U.S. Department of Transportation) it would have been 'Yeah, that's nice. Run a bake sale and get money to fund it.' The conversation has shifted since then."

Conversations about bike lanes, cycle tracks, bike parking and connectivity not only include enthusiasts who want safe paths for recreation, but city planners, traffic engineers and landscape architects like Simone who see bike lanes as inexpensive infrastructure, a smart use of land and a means to support a viable transportation mode. Joining them in the conversation today are public health advocates who see active transportation as an effective tool in the battle against obesity.

Utah Department of Health Physical Activity and Community Transformation Coordinator Brett McIff, Ph.D., knew that the built environment affects people's activity levels. Improving transportation infrastructure to promote paths and sidewalks, encouraging better land-use patterns and promoting urban design would help tackle the obesity epidemic and curb the increase in preventable diseases by providing the environment that makes people want to move. People exercise not because they make a conscious decision to go to the gym, but because the environment around them encourages activity.

### Proper planning for active transportation

With this "Build It and They Will Move" mindset, Dr. McIff found a CDC program called Communities Putting Prevention to Work (CPPW) and tapped in to its federal public health dollars available for use in projects that address obesity issues. He assembled a network that included professionals from the Utah Department of Transportation, Utah Transit Authority and

the state Public Safety Highway Safety Office, as well as representatives from Safe Routes to School, the Salt Lake Valley Health Department and the Wasatch Front Regional Council, which is responsible for coordinating the transportation policies for the greater Salt Lake City and Ogden areas and is the designated Metropolitan Planning Organization.

The goal was to put together a "how to" guide that could be used by city planning departments to promote non-motorized travel. After more than a year of work, the group — which called itself the Bicycle Pedestrian Task Force — published the Utah Bicycle & Pedestrian Master

The goal was a guide that could be used by city planning departments to promote non-motorized travel.







Plan Design Guide. McIff said the guide was distributed to planning departments throughout the state of Utah to develop safe bike lanes and connectivity.

Despite the lengthy bureaucratic name, McIff jokes the guide is reader friendly and geared toward city planners and transportation engineers and others interested in transportation across Utah, which includes rural areas such as St. George to more urban areas like Salt Lake City and Orem. There are 40 pages tucked in the back of the guide that offer options to make walking and cycling more connected and safer for people. They range from recommending cut-throughs in neighborhoods with meandering streets and cul de sacs to hiring additional staff in municipal offices to promote active transportation projects.

As McIff released his guide across the state, both Salt Lake City and Salt Lake County adopted a "Complete Streets Policy," which ensures transportation planners and engineers design and operate safe streets for all users, from pedestrians to mass transit users to cyclists to drivers. The city was also given recognition from the League of American Bicyclists for its efforts to make the area more cycle friendly.

"It was the right place and the right time," McIff said of publishing the guide and the growing movement to better incorporate biking into transportation plans.



### Advocating for the activity

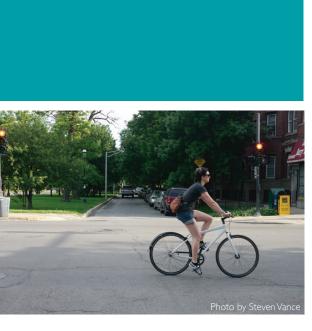
As the bicycle and pedestrian movement picked up momentum in the late 20th century, the Alliance for Biking & Walking appeared on the scene. It formed in 1996 as an umbrella organization for bicycle and pedestrian advocacy organizations and started with 12 member organizations. Today, with 200 organizations across the United States operating under the umbrella, the Alliance for Biking & Walking biennially publishes a report documenting trends in active transportation.

The latest analysis, called the 2014 Benchmarking Report, shows that, from 2009 to 2012, federal transportation dollars targeted to non-motorized transportation equaled 2.1 percent of total transportation dollars. While it was an all-time high for non-motorized infrastructure, it still is woefully lacking when compared to funding for motorized transportation.

According to the 2014 report released in April, the Alliance for Biking & Walking estimates that funding for active transportation projects from 2009 to 2012 amounted to \$3.10 per capita, but motorized funding per capita was \$583.57 for the same period. Targeted funding for bicycle and pedestrian projects in 2013 totaled \$676 million.

Federal transportation dollars for non-motorized infrastructure is woefully lacking.







## The number of states and large cities that have published goals to increase either walking or bicycling levels has ballooned.

Through benchmarking, the Alliance for Biking & Walking hopes to identify best practices across the nation so cities can emulate success stories and avoid mistakes, not repeat them. The success of bicycle- and walking-friendly initiatives cannot be measured, though, without a review of the data. With the goal of providing a resource for professionals who can influence walking and biking capacity and accessibility, the Alliance in 2003 tested its datacollection capability through a pilot effort involving 15 cities and 15 states. Four years later, the first full report on biking and walking was published with information from the 50 most populous cities and all 50 states. The benchmarking report was updated in 2010, 2012 and again now.

The reports rely on data that is collected from a number of government and nonprofit sources, as well as information gleaned from biennial surveys of cities, states and advocacy organizations. These surveys record locally tracked data, such as funding spent on bicycling and walking, number of staff employed by advocacy organizations, extent of bicycling and walking facilities, city and state education efforts, and policies and legislation enacted. Over the years, the report has expanded beyond collecting data on walking and biking and now identifies trends and analyzes state and local efforts to provide bicycle- and pedestrian-friendly communities.

Its efforts may be paying off. Since the first report was published in 2007, the number of states and large cities that have published goals to increase either walking or bicycling levels has ballooned. The number of cities with published goals increased from 25 to 47 between the 2007 and 2014 reports and the number of states with published goals to increase active transportation increased from 16 to 36.

### Making the movement safer

There are five counties in Pennsylvania and four counties in New Jersey served by the Delaware Valley Regional Planning Commission. Office of Transit, Bicycle and Pedestrian Planning Manager Greg Krykewycz said properly connecting the bike and pedestrian paths to improve local mobility is key for the commission, which serves as the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region. So, too, is improving communities' connections to public transit to improve regional mobility.

### The more people who walk and bike, the safer it is to walk and bike.





Krykewycz said the planning commission has transit passenger survey data that shows people who live one mile away — and even less — will choose to drive their car to the station and pay to park as opposed to bike or walk to the transit station. While some may never be converted to biking or walking because of weather conditions or steep hills, others could be converted with better infrastructure, he said.

"There are also some people who drive because they don't feel safe walking or biking even if the distance is short, because there are no sidewalks or trails, and the streets don't feel safe to bike on," said Krykewycz. "We can allow some of these folks to walk or bike by creating some of these missing connections — installing more sidewalks, trails and bike lanes around transit stations," he said.

The more people biking and walking to mass transit, the safer it gets and the more at ease they are on streets and paths. "There's a real safety in numbers, which the data bears out," Krykewycz added. "The more people who walk and bike, the safer it is to walk and bike."

Indeed, as the push to increase the number of bike lanes has increased so, too, has the call for increased safety. Nationwide, 677 people lost their lives and an additional 48,000 pedalcyclists were injured according to the National Highway Traffic Safety Administration 2011 data. That figure is up 9 percent from 2010 and also is higher than the number of fatalities in 2009.

Meanwhile, there were 4,280 pedestrian fatalities in 2010 (the latest available data) and another 70,000 injuries. That's a 4 percent increase in fatalities from 2009.

The cycling advocacy organization PeopleforBikes has shifted the transportation conversations from offering conventional bike paths to building "protected" bike lanes. It has launched a program called Green Lane Project, the goal of which is to help cities build better, safer bike lanes and less stressful streets.

Unlike traditional bike lanes identified by painted lines or signage, protected bike lanes — or cycle tracks — are on street

As the push to increase the number of bike lanes has increased so, too, has the call for increased safety.





#### Protected bike lanes are making people more at ease with traffic by separating riders from cars.

and have some form of physical barrier, whether a curb, parked cars or posts, between the bike and motorized transit. Protected bike lanes also are wider than the general bike lane and are used by cyclists only.

They increase safety through a number of ways, not the least of which is making people more at ease with traffic by separating riders from cars, said Green Lane Project writer Michael Andersen. By abating safety concerns, more people are willing to consider bikes, which in turn, increases the pool of potential bike riders. Like Krykewycz at the Delaware Valley Regional Planning Commission, Andersen said, the more cyclists, the safer the environment.

"There is safety in numbers," he said, explaining that drivers have a tendency to be more aware of bikers when their numbers increase.

One example of a Green Lane Project bike lane is at Bluebonnet Lane in Austin outside the Zilker Elementary School. There was some initial resistance to the lane because it removed a lane of parking from the front of the school. However, the complaints have disappeared since the lane was opened.

"Some of the children ride by themselves or in groups," Zilker principal Randall Thomson told Streetsblog, an online news source advocating for sustainable transportation and more livable cities and towns.

In its first two years of operation, Green Lane Project staff worked with officials in Austin, Chicago, Memphis, Portland, San Francisco and Washington, D.C.. In March 2014, Green Lane Project named another six cities it would work with: Atlanta, Boston, Denver, Indianapolis, Pittsburgh and Seattle.

Nationwide, there are now 141 protected lanes totaling 157 miles, Andersen said. Sixty-three of those miles were added in the last two years, some with the assistance of the Green Lane Project. The ultimate goal, Andersen said, is for the Green Lane Project to become obsolete.

"We want to make this so widespread that we don't have to teach people the basics about these things because they already know about them," Andersen said.

Christine Jordan Sexton is a Tallahassee-based freelance reporter who has done correspondent work for the Associated Press, the New York Times, Florida Medical Business and a variety of trade magazines, including Florida Lawyer and National Underwriter.

# Selling Green

By Christine Jordan Sexton

EALTOR® Eileen Oldroyd works in imageconscious Mission Viejo, Calif. The broker/ owner of Oldroyd Lending and Realty, she drives a decades-old Mercedes converted to run on waste vegetable oil. Clients can often hear the car, dubbed The Veggie Mobile, before they see Oldroyd.

"Selling green is a challenge in Orange County because it's just not sexy," she said, clearly disappointed that unlike other areas on the West Coast like San Francisco, Portland or Seattle, southern Orange County California isn't as progressive, in her opinion, on the green front.

"We don't have a culture of conservation or sustainability," said Oldroyd, who is known as "Green Eileen."

Oldroyd, a recipient of the NAR® EverGreen Award in 2013, has been a REALTOR® for 10 years and has been a certified NATIONAL ASSOCIATION OF REALTORS® Green Designee for the last five.

Upon reflection, Oldroyd said she thought most home buyers by 2014 would be demanding high-performance buildings. And new home builders, she thought, would all be adhering to the better building standards touted by third parties such as U.S. Green Building Council.

"I thought everyone was like my husband and myself ... wanted to be energy efficient ... wanted to have a healthy home," she said. "I had rose-colored glasses on."

So just how well does green sell?

Carson Matthews, an associate broker with Atlanta Fine Homes Sotheby's International Realty, has tracked the sale of newly constructed, third-party certified green homes



Oak Terrace Preserve in North Carolina: Upon build out, the 55-acre community will feature 374 homes and townhomes. With its EarthCraft® Certified homes, public spaces, preserved trees, recycled building material and innovative stormwater management system, Oak Terrace Preserve has been recognized as a national leader in green, sustainable residential development.

(Below) Photos courtesy of U.S. Army Environmental Command







Selling green is a challenge.



New solar-powered, energy-efficient homes in Daybreak, Utah's North Shore Village.

to traditional new construction in the four counties that make up the core of the greater Atlanta area — Cobb, DeKalb, Fulton and Gwinnett.

Matthew's figures show that for 2013 the median sales price of a green home was \$450,500 and that the median sales prices of a conventional home was \$403,014, or about 12 percent less. Matthew also compared the homes by average sales price. That comparison showed that an average price of a green home in 2013 was \$509,761 compared to a non-green home of \$492,909, or just about a 10 percent difference. For both comparisons there were 104 green homes that sold compared to 1,233 conventional homes.

Matthews has a similar study of sales for 2012 also comparing 122 green homes to 900 conventional ones. Again, the analysis shows the median and average sales prices of new homes in the four-county area. In 2012, the median sale of a green home was 2 percent higher than a

conventional home and the average sales price of a green home was 3.6 percent more than a conventional home.

While the sales figures are higher for 2013, the percentage of green homes that sold was just 8.4 percent. Typically, for the years that Matthew has been tracking the sales data information, the percent of green homes has lingered more in the 13 percent range.

Matthews attributed the dip in the percent of green homes selling in urban Atlanta to pent up demand for new construction after homebuyers "blazed through the existing home inventory" over the last several years. "Now builders are coming back and building fast," said Matthews, adding that homebuilders are able to sell the homes without having to advertise them as third-party green certified.

He also noted that the move to have third parties certify homes as green or high performance dovetailed with the crash of the financial markets and a soft real estate market. It became a "big marketing piece for homebuilders," Matthews said of third-party green certification, "because no one was buying homes."

Matthews also notes, though, that the area he tracks includes no new subdivisions, because the core of Atlanta is built out.

Cindy Wasser, manager of Green Building Programs at Home Innovation Research Labs, said interest in certifying homes to the National Green Building Standard (NGBS) continues to increase. Home Innovation Research Labs is an accredited third-party certification agency dedicated to the home-building industry. Wasser said, nationally, there are nearly 33,000 certified homes and apartments (both new construction and remodels) that are completed and certified and another 72,000-plus units — including land developments — in the pipeline.

Specifically, Home Innovation Research Labs has seen a real uptick in interest in NGBS Green Certification for multifamily buildings. Wasser attributes the activity to a variety of reasons including lower operating costs, an appealing feature for the developers, who usually are involved in long-term management. The sustainability moniker also attracts today's young, urbane renters, she said.

There were 24,409 apartments in 976 NGBS Green Certified buildings as of April and another 47,900-plus apartments in 915 NGBS Green Certified buildings being developed.

# 92 percent of homeowners who purchased a green home would buy another green home.

And just how pleased are those with NGBS Green Certified homes? Conducted by GuildQuality and commissioned by the National Association of Home Builders, a February 2014 poll showed that 94 percent of homeowners who purchased a green home within the last five years would recommend a green home and 92 percent would buy another green home.

A whopping 87 percent of those polled listed "none" when asked what green feature they are most dissatisfied with.

The poll was sent to 1,350 people whose homes were built between 2010 and 2013. The findings, published March 2014, are based on the answers of 187 original homeowners.

When asked what features were important when they built or bought a home, 65 percent strongly agreed that energy efficiency was a driving factor and 37 percent strongly agreed that water usage played a role in the decision. Of those who reported that energy efficiency was important, 68 percent of those are satisfied with the results.



Oak Terrace Preserve, North Charleston, N.C.



Fifty-two percent of those who said water was an important decision are satisfied with the performance.

The poll also showed that many buyers were not aware whether their home cost more than a comparable nongreen home or thought their home cost a "bit more" than a non-green home. Indeed, capturing the value of green homes in the real estate market has been a priority for real estate professionals. The NAR® GREEN REsource Council has published a blueprint for MLSs and their vendors to capture high-performance features that can be replicated elsewhere, if desired. (See sidebar on page 42.)

Builders are getting closer and closer to making green their everyday practice.

Additionally, The Appraisal Institute created a Residential Green and Energy Efficiency Addendum to be used with the Fannie Mae Uniform Residential Appraisal Report (also known as Form 1004) to capture energy-efficient features. And in March, the Residential Energy Services Network — or RESNET — agreed to auto populate the appraisers' addendum.

Even if the homes cost more initially, 55 percent of those polled for the NGBS evaluation believed the benefit outweighed the increased cost.

Meanwhile, similar to Home Innovation Lab, the U.S. Green Building Council also reports that an interest in high-performance building is increasing for multi-residential buildings, said Kelsey Mullen, director of residential business development. Mullen called it an "incredible surge" and said upward of 13 percent of all multifamily market units built last year were certified LEED midrise.

Not only are LEED buildings better built, Mullen said that there has been some "feedback" from developers and leasing offices that renters see the value of a LEED certification. He said there is no definitive market-wide study and for now it's "just feed back here and there."

However, on the single-family side, the percentage of those seeking LEED certifications is dipping.

Mullen said that a lot of builders, who understand highperformance, continue to build energy-efficient buildings, but may not be seeking third-party certification.

"We see a lot of single-family production builders doing the right thing but not necessarily certifying under a thirdparty program," he said, adding, "I see the builders getting closer and closer to making green their everyday practice because a green home is not additive, it's taking your everyday practice and making it better."

Christine Jordan Sexton is a Tallahassee-based freelance reporter who has done correspondent work for the Associated Press, the New York Times, Florida Medical Business and a variety of trade magazines, including Florida Lawyer and National Underwriter.

# Greening the MLS

o your client wants to buy an energy-efficient home. Or, perhaps, you have a client who wants to sell their home after having remodeled it just two years ago with energy efficiency in mind and featuring a solid "thermal envelope."

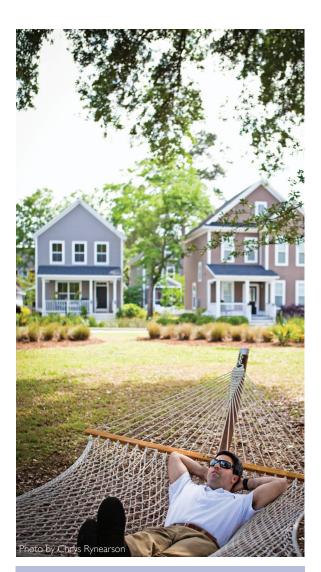
How much more do homes with high-performance features sell for on the market compared to other homes? How much more is the home worth?

Unless the construction is new — and not even always then — getting a comparative market analysis between the sales of green homes isn't easy because Multiple Listing Services (MLSs) don't have searchable high-performance or "green" fields.

"If an MLS does not have a searchable field, appraisers are often comparing apples and oranges," said Punta Gorda, Fla., property appraiser Sandra Adomatis, SRA, LEED Green Associate and co-owner of the Adomatis Appraisal Service. "They are comparing an energy-efficient home to a non-energy-efficient home or a green home to a non-green home."

That could all change due to initiatives being pursued by the NATIONAL ASSOCIATION OF REALTORS® Green REsource Council, among others. In April, the Council published the Green MLS Implementation Guide which serves as an easy-to-follow blueprint to help implement searchable fields for high-performance, energy-efficient homes. The Green MLS Implementation Guide can be used by MLS staff or their software system vendors.

Elmhurst, Ill.,-based broker, REALTOR® and consultant Laura Reedy Stukel worked closely with the Green REsource Council to develop the guide, which is compliant with the Real Estate Transaction Standard and version 1.2 of the RETS Data Dictionary. Updated twice annually so it can remain dynamic, the Data Dictionary "standardizes" real estate data so real estate licensees and other professionals can have consistent information that can be syndicated nationwide, if the MLSs allow.



Oak Terrace Preserve in North Charleston, N.C., is a 55-acre sustainable community owned by the city and developed by private contractors. Homes are EarthCraft® Certified and feature neo-traditional designs with a Lowcountry vernacular.

Of the 500 or so fields in the Data Dictionary, one tenth of them could apply to a high-performance home. The Green MLS Implementation Guide focuses on that subset of 50 fields, Stukel said, and provides MLS staff and/or their software system vendors a road map on how to implement green fields within their MLS.

There are no mandatory or required green fields. MLSs will choose to implement whichever fields they want, depending on the trends they see in their areas. As an example, while solar options may not saturate the Chicago market where Stukel is based, they may be prevalent and in high demand in Phoenix, Ariz.

"Every MLS will have a threshold where they say, 'We have enough homes now and we'll turn these fields on. We are going to look in the Dictionary and when we turn it on, we will do it the Dictionary way," said Stukel, who is an NAR® GREEN Designee.

There are fields for water conservation — with options from low-flow toilets to water-smart landscaping — as well as location, with features for Walk Score to proximity to public transit.

There are MLSs that were early green adopters and have green features. Indeed, Stukel said that research shows that three quarters of the MLSs in the 100 most populated cities have green MLS features. That translates to about 40 percent of the population.

However, the language of "green" hasn't been uniform until the publication of the Data Dictionary. Additionally, some of the early efforts to green the MLS included only fields for new construction.

Stukel said the new Green MLS Implementation Guide will help MLSs be more uniform in the implementation of green fields, and additionally, will work well for existing homes that have been remodeled, revamped and updated. Nearly 100,000 residential upgrades made in hundreds of communities across the United States between October 2010 and September 2013 fell under the Department of Energy's Better Buildings Neighborhood Program.

Stukel, who also is a certified EcoBroker as well as a consultant, public speaker and mastermind behind the blog notYETgreen.com, said those homeowners could benefit if the MLS in their community followed the implementation guide.

"We are at the beginning of the wave of seeing existing homes be able to use this," she said.



Zero Energy House in the Ridgeview Neighborhood of Hickory, N.C.

Kristen Short, the managing director of NAR's Green Designation as well as the Center for Specialized REAL-TOR® Education, said there has been mounting interest among all the players in the industry to better capture the data. Short says, "it's not uncommon these days to see presentations on 'Greening the MLS' or the 'Importance of Greening MLS' at annual industry conferences."

"It is encouraging to me that Greening the MLS as a subject is on the radar," she said.

Adomatis in Punta Gorda agrees. In her 25-year appraisal career, seldom have the homebuilders, REALTORS®, and property appraisers worked together. Yet that, she said, is beginning to change.

"In 2013 my schedule got very busy with traveling and speaking to groups that were mixed groups," she said, noting that the events were attended by homebuilders, REALTORS® and appraisers. "I am seeing more and more requests for that and if we don't get in the same room and talk, we'll never be able to change the process. I am seeing success in that."





"Man's heart away from nature becomes hard." - Standing Bear

# **BOARDMAN RIVER**

### a unique take on a watershed plan

By Tracey C. Velt

he Boardman River is a life. It's not just about human development but the opportunity to restore wildlife and enrichment," says Kimberly Pontius, executive vice president of the Traverse Association of REALTORS® in Traverse City, Mich. "When you restore these ecological systems to where they should be, you're breathing life into the system," he says. That's the sentiment behind the restoration and dam removals of a historic northern Michigan waterway. This amazing river project looks at new definitions of the term "prosperity" and how reimagining the natural realm can impact the regional economy for future generations in terms of smart growth on a very different scale.

The prosperity plan will leverage the economic and community development of the watershed.

#### River Refresh

This project is not only different; it's a huge undertaking. Currently underway, the Boardman River Watershed is developing a new approach to natural resource planning over the 291-square-mile watershed.

The resulting work product — a prosperity plan — will leverage the economic and community development of the watershed, taking into account dam removal and restoration of the river that courses through it. The plan will engage the region to find common goals and activities for the long-term protection of natural assets within the watershed, along with job creation and business.

"The Boardman River Prosperity Plan is a living document that identifies current and potential problems in the watershed, and offers locally driven solutions that leverage the region's ecologic, recreational, economic and social resources," according to Becky Ewing, associate director of Rotary Charities of Traverse City, which is helping fund the project.

It will provide a vision for the entire watershed which includes dam removals and restoration of the 160-mile

### The team hopes to see enhanced recreational opportunities and carefully planned development along the river.

Boardman River. The plan also has the potential to be a model for the state and country on how to truly integrate economic and environmental vision and planning. Once complete, three dams will be removed and one dam modified, and 3.4 miles of the Boardman River will be restored to a more natural, cold-water, free-flowing river, leaving huge opportunities for smart development, recreation and more. "It's the largest dam removal project in Michigan and the largest wetlands restoration in the Great Lakes Basin," says Pontius.

#### An Economic Model

Obviously a project of this magnitude is being watched closely by other states hoping to find a balance between economic and ecological prosperity. Along with a healthier ecosystem, the team hopes to see enhanced recreational opportunities and carefully planned development along the river. In fact, because of its focus on smart growth, this project is supported in part by a Smart Growth Action Grant of \$15,000 from the NATIONAL ASSOCIATION OF REALTORS®. Other funding for the project comes from Rotary Charities of Traverse City, the Great Lakes Fishery Trust, National Association of Counties (NACo), Freshwater Roundtable, Frey Foundation, and other sources.

The leadership team includes organizations ranging from the Grand Traverse Band of Ottawa and Chippewa Indians and Traverse Area Association of REALTORS® to the Rotary Camps & Services and the Grand Traverse Conservation District. In all, 12 local organizations are



represented. Consulting partners include Public Sector Consultants, a Michigan-based research and management firm with a focus on environmental policy; Beckett & Raeder of Ann Arbor, an environmental, economic development and community-planning firm; and Lawton Gallagher Group, a Traverse City communications firm. "We procured a leadership team that was reflective of the community," says Tim Ervin, a trustee on the Board of the Manistee County Community Foundation and a consultant to the Alliance for Economic Success. "The prosperity plan is not a regulatory document. It's intended for use by communities through volunteerism to protect the watershed and enhance economic prosperity."

#### All Encompassing

What makes this project and watershed plan different from others is that a typical watershed plan focuses solely on the environmental aspects of the rehabilitation of a watershed. "Our plan is the only case I know of where watershed planning tries to wrap itself around more than the silo of natural resources," says Ervin.

The Boardman River Prosperity Team's watershed plan hopes to find an accord that balances the triple bottom line for the Boardman Watershed: the economic contributions, social responsibility and environmental demands that this natural resource provides to the region and the two primary communities located on this waterway. "This was unique because it doesn't just look at the natural resources," says Ervin. "It looks at social, economic and cultural impacts. In looking at a watershed plan, you must meet the requirements of the U.S. Environmental Protection Agency and protect the use of waters. The Boardman River and its watershed is the focus of all of the communities in 17 townships. We wanted to broaden the scope so we would end up with a plan to protect the natural resource and provide direction in terms of priorities for economic and community development. It's about the prosperity of the natural resource."

John R. Iacoangeli echoes that sentiment. "Typically, watershed plans have citizen engagement, but those citizens are focused on improving water quality," says Iacoangeli, principal of Beckett & Raeder. "The Boardman Prosperity Plan includes that component, but also stakeholders were presented with business and economic

development prospects. It's not just about improving water quality. It's about improving economic prosperity along the watershed," he says.

#### **Economic Impact**

To date, the Brown Bridge Dam has been removed. Two more dams will be removed in 2015-2016. "The dams are deteriorating, and it's very expensive to rebuild them," says Pontius. A 2006 report by the U.S. Army Corps of Engineers pointed out that all four dams are damaging the ecosystem of the area and reducing trout populations.

At one time, during the logging heydays, the river was used as a means to float logs to Traverse City and the saw mills. Once the logging industry faded, in the 1920s, hydroelectric dams were built. "Now, we'd like to return the fisheries back to what they used to be," says Pontius. "Just one of many industries that will thrive under the new prosperity plan."

The Leadership Team has identified 26 initial metrics for tracking the status of water quality and other environmental health conditions; economic conditions; housing; arts, culture and recreation offerings; and educational achievement in the watershed in order to evaluate longterm success in achieving the Prosperity Plan goals.

At this stage, there are no hard and fast, or even estimated, numbers that speak to the economic opportunities the river revitalization hopes to bring to the area. That will come once the team meets with elected officials so they can "understand what they have in their backyard and can leverage that into economic opportunities," says Iacoangeli.

Pontius agrees. "It's too soon to tell [what the economic impact will be]. But, as development may start to occur, we have a plan now that provides guidelines for developers so they can make smart decisions. We tied it into the REALTOR® Smart Growth Grant Program, because we want the community to see that REALTORS® care about the integrity of the region. We're members of the community and have a vested interest in the outcome," says Pontius.

#### Citizen and Policymaker Engagement

Already, the Prosperity team leadership has seen the possibilities from different areas. "Part of what came to light is that the western part of the watershed is more of a recreational asset, while the eastern part is used in a different way," says Iacoangeli. "People on the eastern side of the watershed are hunting and fishing to supplement the food they provide their families. It's a different

As development starts to occur, we have a plan now that provides guidelines for developers so they can make smart decisions.











dynamic for each side of the watershed."

That's why input from both citizens and policymakers is vital. "The goal is to have state and federal policymakers involved in following this project because we think we will learn things about planning that should be considered in future policy initiatives," says Ervin.

"What we're trying to get at is the economic potential," says Ervin. "We want a plan that prepares the area for future projects and protects the natural resources. It's classic placemaking — making these places where people want to come play and work."

The collective action model will take about two years to complete. "We are looking at the top priorities of all the communities involved. Then, we will see what priorities are shared so that we can develop collaborative projects such as blue water trail systems, community developments and more. It is pioneering work and it makes sense. It is not just about putting a trout structure in the river. We are doing it while being mindful of the sustainability of the community," says Ervin.

Pontius agrees, "What does prosperity look like? Beyond canoe rentals, a revitalized river will attract sports fishing and development. The Prosperity Plan was put together to use as a guidebook for the region. By returning the river to its natural state, there will be a huge impact on economic prosperity. It's a game changer for the region. And, this game changer will have implications on a local, state and even national level."

To download a copy of the Boardman River Prosperity Plan, go to http://www.theboardman.org/ userfiles/filemanager/386/

Tracey C. Velt is an Orlando-based freelance writer.

#### **ECONOMIC AND ENVIRONMENTAL BENEFITS**

In addition to the environmental benefits, the rebirth of the Boardman Watershed is also a community development project with many long-term benefits.

#### **Environmental**

- Enhance and restore habitat for native and naturalized fish species and organisms preferring cold water.
- Restore over 3.4 miles and reconnect 160 miles of highquality river habitat.
- Restore more than 250 acres of wetlands and nearly 60 acres of upland habitat.

#### Community

- Impact the local economy by stimulating increased recreation and tourism.
- Promote business growth and new opportunities from increased interest in water-related activities, including fishing, kayaking and canoeing.
- Support the long-term goals of the Grand Vision guiding principle of "protecting and preserving the water resources, forests, natural areas and the scenic beauty of the region."

#### Regional/Collaboration

- Engage all interests, cultivating a sense of ownership in the project and outcome, and ensure that the process is sensitive to community needs and concerns.
- Secure unparalleled cooperation among federal, tribal, state and local government agencies and nonprofit entities.
- Document and archive the process in detail as it unfolds, and initiate the development of a model that will be transferable for use by other communities faced with similar issues.
- Continue to involve a diverse group of individuals and organizations throughout the process, and into the future, to ensure the long-term health of the Boardman River.

#### Educational

- Create an on-the-ground laboratory for local schools.
- Support a variety of scientific research initiatives to assess the impacts of dam removal.



Missouri's first "passive" home won the new construction category in the St. Louis Energy Efficient Housing Contest.

The St. Louis Association of REALTORS® helps turn abandoned properties into energy-efficient housing

ike many cities across the country, St. Louis has thousands of vacant lots and empty buildings. In fact, the city owns nearly 8,000 vacant lots and 3,500 empty buildings — a substantial inventory that is more concentrated on the city's northside.

Collaboration and some friendly competition are helping transform some of these abandoned properties in St. Louis into innovative, stylish and efficient green housing.

The St. Louis Association of REALTORS® (SLAR) and Housing and Community Solutions, Inc. (HCSI) envisioned replacing the vacant lots and buildings with inviting energy-efficient alternatives, while simultaneously educating the public about the benefits of sustainability. To achieve that vision, they identified and secured approximately a dozen vacant lots or buildings owned by the city of St. Louis, St. Louis County and Universal City.

Collaboration and friendly competition are helping transform abandoned properties in St. Louis. The St. Louis Association of REALTORS® is proud to be part of the effort to build a brighter future for the next generation of homeowners.

They then turned to architects, designers, builders, contractors and community visionaries for innovative housing concepts. The result was St. Louis' first Energy Efficient Housing Contest.

"The necessity of creating a sustainable market in the St. Louis Metro area cannot be understated," said Dawn Kennedy, CEO of SLAR at the kick off of the contest. "The St. Louis Association of REALTORS" is proud to be part of the effort to build a brighter future for the next generation of homeowners."

The contest required that entries not only be energy efficient, but also a prototype. Design/build teams were called on to create innovative, healthy, right-sized housing for targeted consumer groups. But the contest also required

# We wanted to develop some models people could learn from and use in the future.

that plans must be able to be replicated elsewhere in the city. Winning contest entries would serve as models for success stories throughout St. Louis.

"Ideas that could be replicated were important because we wanted to develop some models people could learn from and use in the future," explained Eric Friedman, a REALTOR® and president of HCSI, owner of the Friedman Group and SLAR board member.

The contest was a collaboration of local government, including the city of St. Louis and St. Louis County and nearly a dozen nonprofit and business partners. An NAR \$15,000 Smart Growth Action Grant also helped organizers hire a consultant to help manage the contest and develop and use various educational and promotional methods to raise public awareness about the benefits of energy efficiency.

Entrants were asked to focus on developing energyefficient housing for first-time buyers, live-work unit entrepreneurs and empty nesters. These groups are ideally suited to benefit from the sustainable home designs the contest generated. The St. Louis County strategic plan has identified the attraction of millennials and support for aging-in-place seniors as priorities, so Friedman said it made sense to target the contest to the needs of these consumers.

"We saw compact housing as a new type of product that could be built for those populations," said Friedman. "Compact housing isn't something we often see being built."

#### Wide Variety of Winning Entries

Winning entries represented a wide range of sustainability options. One project was a net-zero, new construction home, which produces more electricity than it consumes. Another developer turned a drafty, empty building into housing with a Home Energy Rating (HER) of 50, meaning it is 50 percent more energy efficient than a standard new home. A third winner created designs for an inexpensive, energy-efficient home that can be adapted to suit any neighborhood.

Architect Mark O'Bryan produced the winning entry in the design-only category for a neighborhood in Lemay, an inner-ring county suburb just 20 minutes south of the Arch. The design features a simple, compact floor plan for a 3-bedroom residence that can be a stand-alone single home or a side-by-side duplex. It includes a variety of façade choices for easy replication and neighborhood infill; energy-efficient heating and cooling; water conservation; and green building techniques.

#### Winning entries represented a wide range of sustainability options.



The St. Louis Energy Efficient Housing Contest design-only category winner by Architect Mark O'Bryan.

#### What we build now will be part of our children's future.



Green historical developer Patty Maher, winner of the contest's Historic Rehab category.

"What we build now will be part of our children's future, and perhaps the next two or three generations," said O'Bryan, president of Art & Architecture. "Architects must be involved in the small homes market, and everyone in the house building market MUST be mindful of creating the most energy-efficient homes as possible for this entry-level market. It is key to economic survival of the future owners, or renters, especially considering that homes built now should last another 80 to 100 years with proper care."

Green historical developer Patty Maher won the contest's Historic Rehab category and transformed a two-story empty brick building into two energy-efficient, side-by-side townhomes. The new 2,300-square-foot homes feature 12-foot ceilings and exceptionally low heating bills. In fact, even when the St. Louis' temperature dips below zero, the townhouse owner can expect to save up to 70 percent on the average heating bill for a similar-sized home.

"I take old, 100-year-old properties that are uninhabited and gut and rehab them with complete new systems according to Missouri Historic Preservation and Energy Star standards," explained Maher. "We builders must apply energy standards or get out of the game."

Missouri's first "passive" home won the new construction category. The single-family home met the Passive Building Standard, meaning it uses 90 percent less energy than conventional building energy codes. Architect Ralph Wafer with Architecture & Planning worked with Trumpet Construction and Butterfly Energy Works to build a house that utilizes a Geothermal Heat Pump and Energy Recovery Ventilator; solar panels; and kitchen cabinets made from sycamore lumber milled from logs salvaged from local tree service/tree removal companies. The result was a modern Net Zero Plus home that produces more electricity than it uses.

Wafer explained that the passive home offers substantial benefits for the homeowner and makes sense for the future.

"There are multiple rewards. A building far superior in occupant comfort and energy consumption is created; awareness of better building materials and techniques is heightened and solutions to significantly reducing energy use are seen as reachable," said Wafer. "Although this project was the 'first of', the next generation is already being designed."

#### **Educating Homeowners**

But the St. Louis Energy Efficient Housing Contest went beyond bringing innovative housing plans from the design table to the construction site. It had an important educational component. The contest's website offers a wide



Everyone in the house building market MUST be mindful of creating energy efficient homes.





The winning entry in the Historic Rehab category is a transformed two-story empty brick building into two energy-efficient, side-by-side townhomes.

range of tips and resources about sustainable housing, useful to both the public and industry insiders. The contest recognition ceremony even included an Energy Efficient Housing Seminar that explained the basics of energy-efficient housing, the benefits to the homeowner and financing options.

"This wasn't just a contest," explained Friedman. "We're working for cultural change. Both for our members and for the public."

#### Committed to Sustainability

The Energy Efficient Housing Contest was the latest step in an ongoing effort to boost St. Louis' livability. It's a process that has been underway for more than 15 years.

"The contest fits into a long context of sustainability," said Friedman. "It's a process that began back in 1998 when SLAR was asked for assistance in the creation of a State Historic Tax Credit."

Back then, St. Louis had the dubious distinction of being the second most sprawling city in the country. Freidman says the State Historic Tax Credit has been a game changer in helping the city move from sprawl to sustainability. Missouri's state historic tax credit differs from its federal counterpart in important ways. It is transferrable, includes homeownership and doesn't require a collaborator.

"We've developed a really good, elegant system that includes homeownership," said Friedman. "It can be combined with federal tax credits and can also be used to help increase workforce housing."

The winners of St. Louis' first Energy Efficient Housing Contest are inspiring the next generation of green building.

Since Missouri adopted its State Historic Tax Credit, 100 buildings have been rebuilt for 5,000 residents and there has been an explosion of entrepreneurial activity. The Wall Street Journal called it a model for the nation.

Then in 2012, civic innovator Dan Burden came to St. Louis and guided a walking audit of portions of the city. Walk/Live St. Louis 2012, another HCSI project, brought together community leaders, nonprofit organizations, public entities and industry stakeholders, such as SLAR, to promote a more walkable, bikeable and safe city. Nearly 500 people participated in nine events at more than a half dozen city locations. These types of events get people excited and inspired to promote smart growth and sustainable housing.

Now the winners of St. Louis' first Energy Efficient Housing Contest are inspiring the next generation of green building. Designers, developers and REALTORS°, working with government and other community leaders, are ensuring St. Louis's long-term livability by filling the city with sustainable, affordable and beautiful homes and educating future homeowners about the green possibilities.

## WATER CONSERVATION

#### Drought hitting California hard

By Brian E. Clark

alifornia, the Golden State, is in danger of turning brown. Or, some climatologists worry, significantly browner. Now in its third consecutive dry year, California Gov. Jerry Brown declared a drought emergency in January and warned in a speech that things might get worse for the state and its 38 million residents:

"Among all our uncertainties, weather is one of the most basic," he said. "We can't control it. We can only live with it, and now we have to live with a very serious drought of uncertain duration. We do not know how much our current problem derives from the build-up of heat-trapping gasses, but we can take this as a stark warning of things to come. It is imperative that we do everything possible to mitigate the effects of this drought."

And in February, the crisis prompted President Barack Obama to visit Fresno in the heart of the San Joaquin Valley, the so-called salad bowl of the United States.

Federal and state officials have announced drastic cutbacks on how much water they will be able to deliver.



Though heavy storms swept through the state at the end of March — drenching the lowlands with rain and dumping up to seven feet of new snow in the Sierra Nevada - state officials on April 1, considered the end of California's wet season, said the snowpack had an estimated water content of just 32 percent.

Mountain reservoirs look like nearly empty bathtubs and federal and state officials have announced drastic cutbacks on how much water they will be able to deliver to California's 80,500 farmers and ranchers, who use 80 percent of the state's water to produce crops, livestock and dairy products worth nearly \$45 billion in 2012.

### Residents who live in both rural and urban areas are being urged to cut back their water use.

That means many will turn to wells for water, but an estimated 500,000 acres of the state's 8 million irrigated acres will be left fallow this year.

Meanwhile, residents who live in both rural and urban areas are being urged to cut back their water use, stop washing their vehicles as often, replace lawns with desert-like landscaping and replace washing machines and dishwashers with more efficient appliances.

#### One Resident's Changes

Lisa Perlmutter, who lives in suburban San Diego with her husband and daughter, re-landscaped her relatively small lawn several years ago and replaced it with paving stones and drought-resistant plants watered with drip irrigation "because it seemed like the right thing to do for our region."

She said she'd seen lovely examples of beautifully xeriscaped — landscaping that reduces the need for supplemental irrigation — yards that inspired her. "I was determined not to put in grass, but didn't want to go with rocks and cactus," she said. "I love the natural look of our garden much more than the manicured-lawn look. But that could just be my aesthetic."

Like many Californians, Perlmutter said it is easy to forget that much of California has an arid climate. San Diego County, which has a population of 3.2 million people, gets an average of 12 inches of rain a year. Likewise, metropolitan Los Angeles — with 16.4 million residents — gets just 15 inches of precipitation annually. More than half of Southern California's water comes from Sierra reservoirs



or the Colorado River, but the remainder is pumped from aquifers — many of which are declining.

"With such little rain during the winter and the possibility of water shortages looming, we've become more conscious of our water usage," she said. "The first thing I do is put a bucket in my shower and collect the water while it is warming up. I use that water for my plants. Our daughter Flora was initiated during our last drought to turn off the water in the shower while she is soaping up — and she has continued that habit ever since."

Perlmutter said she has become more conscious about doing full loads of laundry and only running the dishwasher when it is full. She also bought a high-efficiency washer.

"And when we remodeled in 2010, we replaced all the shower fixtures with ones that meet state guidelines for water efficiency and installed all low-flow toilets," she said. "I've also tried to convince my husband Mark to not rinse the dishes before putting them in the dishwasher, but have not been very successful on that point."

Though the Perlmutters have done their part, they still worry about wildfires, even in normal rainfall years. In October of 2003, the Cedar Fire swept through parts of San Diego, destroyed more than 2,000 dwellings, killed 15 people and even burned homes in the Perlmutters' Scripps Ranch neighborhood. Last year, the Rim Fire near Yosemite National Park scorched more than 250,000 acres.

"I've always worried about fall fires," said Perlmutter, who has lived in San Diego for nearly 15 years. "And I'm concerned the drought will make conditions more perilous. It may even expand the timeframe when wildfire danger is highest, so more months to worry."

#### What Caused the Drought?

Most meteorologists blame the current drought on a persistent high pressure ridge that has shunted the storms that usually soak California in the winter northward to British Columbia and Alaska.

Daniel Swain, a Stanford University researcher and doctoral student in the Department of Environmental Earth System Science, dubbed this phenomenon the "Ridiculously Resilient Ridge" in his Weather West blog last year. The term stuck, garnering Swain a good deal of publicity, largely due to the alliteration and easy to remember name.

Some cities are paying homeowners a certain amount per sauare foot to remove their lawns.





Catchy moniker aside, Swain said this "anomalous, extraordinary" ridge was anchored in the northeast Pacific for most of 2013 and the early part of 2014, resulting in much less precipitation than normal for well over a year. And that followed two other dry years.

"The good news is that it rained and snowed a bunch in late March," he said. "But with the deficits from the previous 12 months, we'd need a tremendous amount of above-normal precipitation to even come close to making up that deficit. Hydrologically speaking, we're now done with the rainy season here in California. The reservoirs are still way, way down, conditions are very dry, water deliveries to farmers will be extremely low and there's a good chance the wildfire season will be bad."

When Swain looks into his crystal ball — at least for next year — he sees weather conditions improving, if only because there is no precedent in the past six decades for the Ridiculously Resilient Ridge sticking around for another year.

Moreover, he said there are "signs that we're trending toward a strong El Nino event," which could mean even above-normal precipitation.

"We'll have to wait and see, though," he said. "But it's fairly unlikely that we'd have a repeat of this winter. However, it's way too early to get excited about the El Nino having any drought-busting potential."

Climate scientists who look back thousands of years, however, warn that droughts of 10, 20 or even 100 years have occurred in California and the Southwest. In 1580 — when Englishman Sir Francis Drake surveyed the West Coast — tree-ring studies of Sequoias in the Sierra show that next to no rainfall fell that winter, said B. Lynn Ingram, a paleoclimatologist at the University of California, Berkeley. Wide rings show years of growth and adequate rain, while narrow rings indicate dry years.

"Strings of dry years do happen periodically," she said. "And 1580 was the single driest year in the past 500 years. It's certainly not as dry as that now, fortunately. Some droughts, though, lasted more than a decade and occurred every 50 to 90 years. There were also wet cycles that lasted a couple of decades."

She said the medieval period was exceptionally warm and arid in California and the Southwest. In the Four Corners region, two long droughts that lasted more than 100 years are associated with collapse of the Anasazi Indian civilization, she added, noting that the recently concluded 20th Century was around 15 percent wetter than the average for the past thousand years.

"So there is a chance we could be heading back into a naturally drier cycle," she said. "And of course on top of that we have warming that is going to impact the region and make things drier. We've already seen some evidence of that having an impact with spring coming earlier, increased wildfires and a diminished snowpack."

Ingram said Australia recently weathered a decade-long drought and managed by trimming water usage by 50 percent through massive recycling, building desalination plants, making agricultural irrigation more water efficient and other mandatory efforts.

"We haven't reached that point yet, though I've heard of some cities that are paying homeowners a certain amount per square foot to remove their lawns," she said. "I'm not sure how effective that will be overall. At the least, water utilities should have tiered rates starting with a certain price for enough water to meet basic needs and becoming more expensive so you'll think about whether you want to use 50 to 70 percent of your water on lawns and outdoor landscaping."

Ingram said she has considered xeriscaping her Bay Area lawn, but hasn't been able to convince her husband to have the lawn replaced.

"He might do it if there were a financial incentive," she said. "It can be expensive. But like with solar, we need to think long-term about this. And people do like having green lawns."

Ingram acknowledged that the so-called "elephant in the room" is climate change and said numerous computer data show California becoming warmer and drier in decades to come, reducing the snowpack in the mountains.

"A lot of the West relies on snowpack melting in the spring for its water," she said. "Warming will increase evaporation so the soils will be drier, even if the precipitation remains the same."

Ingram said archaeological studies show that droughts led to hardship, malnutrition and struggles among Native Americans in California and the Southwest.

"We're having some political conflicts over how to deal with the drought," she said. "Back in the 80s, there was a controversial proposal to divert Sacramento River water around the California Delta for Southern California cities and San Joaquin Valley farms. It was opposed by environmentalists and defeated by voters. Now there is a proposal to build two tunnels under the Delta, which is stirring old animosities again."

#### **Economic Impact**

Richard Volpe, a U.S. Department of Agriculture economist at the Food Markets Bureau in Maryland, said concern over how California's drought will affect food prices is well founded.

"It's a major agricultural state, the largest producer overall in the country," he said. In fact, it supplies the United States with more than 90 percent of its almonds, broccoli, celery, kiwis, lemons, nectarines, pistachios and plums, and is also the leading state in the water-intensive dairy business.

"So when there is a major event like a drought, there is concern about food supply. In California, the major worries are fruits and vegetables, dairy products and to a lesser extent, commodities like beef and eggs."

Though the drought could cause those prices to increase nationally, it hasn't happened yet, he said during an interview on the last day of March.

"From my perspective as a retail food specialist, what we've seen so far are normal, seasonal variations in fruits and veggies," he said. "That doesn't mean it won't have an effect, or that it won't drive our forecast up for the year. If growers can't plant fields this spring or water vines and trees, the impact won't show up until the fall.

"In my view, the bigger issue — taking the longer view — is the worry about farmers letting their acreage go fallow for fruit and nut trees, which could cause them to die. I'm especially concerned about alfalfa, which is

The bigger issue is the worry about farmers letting their acreage go fallow for fruit and nut trees.



the primary feeding source for dairy cows. If that acreage isn't cared for, we'll see production decrease and we'll have a lingering impact next year or the year after that and we could be dealing with several years of accelerated food price inflation — especially if the drought persists.

"We're not ready to make that call yet, but it certainly could happen if producers perceive increased risks and respond by reducing output or acreage. Every crop is different, but California farmers are no strangers to drought. And in the Midwest, agribusiness responded beautifully to drought in 2012 with their field crops. But we won't know how severe the impact in California will be until the harvest happens and the year is done."

Dave Heylen, spokesman for the California Grocers Association, concurred with Volpe and said that while prices for fruits — such as strawberries — and vegetables produced in California are going up some, consumers in the Golden State may not be affected this year because stores can buy from growers around the country.

"With the distribution system we have now, retailers can bring in produce that normally would come from here," he said. "But those same retailers say that if the drought continues, it will probably have more effect on prices in 2015 rather than this year if they have to cut back what they grow. Needless to say, we need a lot more rain."

#### Farmer's Perspective

Tim Chiala, a co-owner of George Chiala Farms in the Santa Clara Valley, was blunt in his assessment of the drought:

"This really stinks," said Chiala, whose family raises jalapeno peppers, garlic, string beans, strawberries and other produce on 1,300 acres. "It makes me really nervous, but we're better off than some guys because we have access to ground water, so we can pump what we need and don't have to rely on the State Water Project for irrigation. I'll be giving some of my water to a neighbor friend so his orchard's trees won't die."

Chiala, who also serves as general manager of a company called Nature Quality, said he also buys produce from farmers in his region and has seen prices rise because of the drought. "It's also increased the competition for land that has water and raised those prices, too, which is something people don't think about right away."

Though Chiala has weathered earlier dry spells, he said the current drought is more serious, "like sailing uncharted waters."

"We really don't know what is going to happen. We made our crop plans in November and had no water restrictions then. We knew something was going to happen, so we started looking at our wells to make sure they were in working order.

"And that's a good thing because about three weeks ago (early March) we got a letter saying the State Water Project was cutting us down to zero percent. That was more than a little upsetting. If I didn't have water to pump from wells, I would have lost thousands of dollars per acre. I had already transplanted from the nursery, I'd fertilized and had drip tape in the ground.

"The timing wasn't good. So we are going back and forth about this with our water district board to say 'Hey, if you are going to cut us off, let us finish our crop work.' There has to be a better way to do this."

#### **Ground Water Worries**

Chiala said his water table is in good shape, for the time being. However, Brian F. Thomas, a hydrologist at the University of California, Irvine, said aquifers in many parts of the state were already falling precipitously even before the latest drought struck.



#### This year's drought will be an epic event, especially for communities that were not allocated surface water and have to rely on aroundwater.

"Aquifers are either recharged naturally by rain and snowfall as water filters down through the soil and eventually reaches the groundwater," Thomas said. "Or, as a number of cities have done, it's replenished using some sort of recharging system."

But in a year with the snowpack at just a little over 30 percent, the natural recharge this year will be minimal, he said.

"This year's drought, unfortunately, will be an epic event, especially for those communities that were not allocated surface water and have to rely on groundwater," he said. "And for areas that haven't recharged the aquifer, it will be tough."

As the population has more than doubled in California over the past 50 years, water tables have been drawn down. A recent U.S. Geological Survey analysis of groundwater data showed more than 60 percent of 3,400 wells reviewed around the state showed drops between 2000 and 2013. The average decline was more than 15 feet in the San Joaquin Valley and Southern California had drops of more than 50 feet.

It's far worse in some drier areas, Thomas said. In the Coachella Valley — a major producer of citrus fruit — he said the water table has fallen roughly 150 feet since 1964. And in Borrego Springs, which receives no surface water, the aquifer level has dropped nearly 200 feet since 1950.

Thomas said communities can continue to sink wells deeper, but that is expensive because of additional construction, pump and electricity costs. And at some point, he warned, the water quality comes into question.

"Then it's not only an economic equation, but is the water even usable?" he asked rhetorically. "Generally, as you go deeper in an aquifer system, the water tends to be older and the longer it's been in contact with the surrounding sediment or bedrock material, it can leach out material from this rock. For example, in Borrego Springs the lower aquifer tends to be very high in total dissolved solids. It almost becomes like a saltwater. It's not quite at that level, but it's more salty than the water in the upper part of the aquifer."

Thomas said the solution to California's water needs is sustainable management.

"That means including all stakeholders in the process, especially agriculture, when decisions are made about water resources," he said. "First and foremost on the agenda is reducing demand. The big question is can conservation be increased and can urban, agricultural and industrial water use be trimmed?



Effect of the drought on Uvas Reservoir in Santa Clara County.



#### Everyone is going to have to compromise.

"If farmers are going to give up water rights, they'll have to be compensated," he stated. "Cities can't just take it. In California, there is a tendency to blame agriculture for using the most water, so ag needs to do something. I don't think that's the right viewpoint. Everyone is going to have to compromise."

Thomas said he, like most scientists, is worried about what climate change portends.

"I dislike the word 'grim,' but I will say things are uncertain," he said. "We don't know exactly what is going to happen. But more than likely, it will get drier in Cal and the extremes will get more intense. Rains will get heavier and the droughts will get longer. So in terms of adaptive management, we can and must make changes. It's just a question of when."

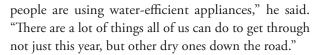
#### **Environmental Optimism**

At a time when the state's rivers, trees and wildlife are under stress from lack of moisture, it might seem surprising that Natural Resources Defense Council attorney Doug Obegi is upbeat about the future of the Golden State.

But Obegi, an ardent environmentalist based in San Francisco, believes Californians can adapt to a changing climate. For starters, he said the state must protect the water it has, use it as efficiently as possible and find new ways to adapt homes, cities, farms and industry to a world where water is becoming scarcer.

"I think there's a real cultural shift underway," he said, noting that waterworks districts in Los Angeles County are offering up to \$5,000 to convert lawns in a program called "Cash for Grass."

"It's become 'cool' to have drought-resistant landscaping that attracts native birds and butterflies because it shows you care about the environment. Inside their homes,



On the agricultural side, Obegi said changes are coming, too.

"But there are real challenges," he said. "Farms use about 80 percent of the state's water and a lot of it is relatively inexpensive. Because of our rules and water-rights system, you can have water districts right next to each other where one pays \$7 per acre foot of water and growers get virtually as much as they want and the district next to them gets very little or no water and when they do, it can cost several hundred dollars or more per acre foot.

"So the economics are trickier. There are also cultural issues, because some folks feel the water is theirs, whether it comes from wells or rivers. But the good news is that we've seen improvements in agricultural water-use efficiency over the past 40 years. We've almost doubled the crop-per-drop and revenue-per-drop ratio, so ag is doing better with less water."

"But it's uneven, with some water districts investing a lot in efficiencies, while others haven't," he said, praising the South San Joaquin Irrigation District for raising its rates two years ago from \$6 to \$9 per acre foot to pay for a system that provides for concentrated watering around trees, vines and row crops. The water automatically shuts down when the ground reaches a predetermined level of moisture, and growers need to give a 24-hour notice to order water from their cell phones.

"Yet a lot of districts' canals remain unlined with concrete, so a lot of water is wasted," Obegi said. "Many continue to use flood irrigation rather than sprinklers, drip or micro-drip techniques that are far more precise in terms of putting water right on the plant where it needs it. Those are the kinds of tools that are the best investments for California, taking the lead from parts of the state that are already doing the best job weathering the drought."

Obegi said some communities in the Bay Area and Southern California that invested in conservation, groundwater banks and diversified their water supplies should do well through 2014.

"But it's still a very serious drought year, one of the driest on record," he said. "And with a growing population and climate change already affecting us, we can't sit still. We have to continue to invest in our water supplies."





#### The challenge is to design a new system that is better balanced, while providing better protections for the environment.

However, he said, that doesn't mean building big new dams and reservoirs in the Sierra, diverting water from the Delta or overturning environmental protections for the state's fish and wildlife.

"A lot of people are advocating for their short-term interests," he said. "But taking more water from the Delta will further worsen conditions for native species and will hurt fishermen and Delta farmers. In a wet year, 30 percent of the water going into the Delta is diverted from going into the Bay. But in a dry year, it's around 70 percent. That's backwards. Scientists say once you divert more than 25 percent, freshwater fisheries suffer."

Likewise, he said the push for building big new dams is misguided. "With 1,400 dams and reservoirs in the state — many of which are not anywhere near full we already have plenty of storage," he said. "They would destroy some Native American sacred sites and we just don't have water to fill them.

"The challenge is to design a new system, given that our rivers and the bay/delta are already overtapped. How do we create a system that is better balanced while providing better protections for the environment while having more realistic allocations for farmers so that they don't have to wait until the last minute to figure out if they'll be getting water and how much?"

Obegi said the wisest investments would go toward improving how the state uses the water resources that are already available.

"That includes upgrading agricultural and urban water-use efficiencies by doing things like recycling our waste water. We still only treat a tiny fraction of the waste water that is produced. There are communities, including the one where I grew up in Orange County, where they now have the largest waste-water recycling plant in the country. It produces ultra-pure, potable water that is cheaper than water imported from the Delta.

"We think that's the way to go. We're confident that cultural shift is occurring. But we've got to get agriculture to come along, too."

Brian E. Clark is a Wisconsin-based journalist and a former staff writer on the business desk of The San Diego Union-Tribune. He is a contributor to the Los Angeles Times, Chicago Sun-Times, Milwaukee Journal Sentinel, Dallas Morning News and other publications.



By David Goldberg

hey called Atlanta "the poster child of sprawl." In the 1980s and 1990s, the metropolitan region was growing in leaps and bounds, unimpeded by natural barriers that could stop the seemingly boundless suburban development driven by an influx of refugees from colder climes. "Atlanta may be the fastest-spreading settlement in human history," said national real estate expert Christopher Leinberger in the mid-1990s, when the metro Atlanta commute shed swelled to 50 miles in every direction, and farther on the popular north side.

Fast-forward to 2014, six years after the collapse of the housing bubble, and Atlanta has become a poster child for the opposite trend: infill development, or "walkable urbanism" as Leinberger calls it. "In this real estate cycle, 60 percent of development in Atlanta has happened on

Walkable locations are growing more than twice as fast as the market as a whole.

less than 1 percent of existing land area," he said, basing his figures on an analysis he and associates at George Washington University conducted. "That's compared to the 1990s, when the overwhelming share happened in a conventional suburban locale."

Walkable locations — neighborhoods where a mix of homes, offices and shops exist in close proximity to each other — are growing more than twice as fast as the market as a whole. Development at the fringe of the metro area has remained at almost a dead stop, he said.

While exemplary for the radical nature of the shift, Atlanta is hardly alone, Leinberger and other experts said. Washington, D.C., Chicago, Boston, San Francisco and Seattle — all of which in the 1980s and 1990s saw rapid development at the fringe and slow or no growth in the core — have reversed that trend in recent years. While an up-and-coming region like Nashville may be flirting with a sprawl revival, it is the exception and not the rule, even among the Sunbelt cities known for sprawling in the past.

Of course, Atlanta and dozens of other regions are still dealing with the legacy of spread-out development.

#### People in compact places are more active.

In April, metro Atlanta topped a ranking of mostsprawling large metros in a report from researchers at the University of Utah and Smart Growth America. The researchers used an index based on residential and employment density; the degree to which offices, homes and shops are segregated or integrated; the share of the region's jobs and residents clustered in centers; and whether the street network is walkable as well as drivable or only drivable.

Researchers then looked at "how sprawl affected the household pocketbook and individuals," said Reid Ewing, the Utah planning professor who led the research. Comparing the combined cost of housing and transportation in more sprawling and less sprawling regions, "We found that the increased transportation costs associated with the automobile, combined with the lower housing costs in sprawling areas, was equal to the increased housing costs in more compact areas where transportation costs were low," Ewing said. "Transit and walking is much higher in the compact places, and drive times are shorter. People are spending less of their time and money commuting."

In terms of safety on the roads: "We looked at crash rates and found people in compact places have half the fatality rates. There are more crashes in compact areas, but they aren't nearly as likely to be fatal. We speculated that is because they are at much lower speeds." Individual health: "People in sprawling areas are far more likely to be obese and suffer from illness associated with it, including high blood pressure, coronary heart disease and type II diabetes — controlling for race, income and education. People in compact places are more active and spend less time in the sedentary activity of driving." And in terms of economic mobility: "You're much more likely to move up the economic ladder in a compact place than a sprawling place. We speculated that it is mostly a result of job accessibility. In a more compact place low-income people have better access to jobs."

But while Ewing's sprawl study found significant remaining impacts from decades of sprawling







You're much more likely to move up the economic ladder in a compact place than a sprawling place.

#### The miles driven per person has been flat or dropping.





development, it also certified the slowing of the trend. Even as metro areas have continued to add people accounting for 85.4 percent of the population according to a March census report — sprawl was "about 1 percent worse" from 2000 to 2010, Ewing said. "That's not a lot," he added. "If we had looked at 1990 to 2000 there would have been a much greater difference."

"The sprawl energy is dimming, there's no doubt," said Robert Lang, a professor of sociology at the University of Nevada - Las Vegas specializing in metropolitan growth and development. "I was a skeptic for a long time, but now I'm convinced."

The evidence shows up in a number of trends, Lang and others said.

#### **Transportation**

For decades after World War II the rate of driving — the number of miles driven per American each day — was increasing faster than population. The typical household was driving more and more each year, and commercial

travel was going farther. Women joined the workforce in larger numbers, the economy grew and people had the means to travel more.

But by the 1990s, the miles driven per household plateaued. Since the early 2000s, the miles driven per person "has been flat or dropping," said Eric Sundquist, managing director of the State Smart Transportation Initiative at the University of Wisconsin. "The economy only explains part of it," he added. Driving dropped significantly when gas prices soared and the economy soured in 2008, "but it hasn't really rebounded."

He cites a number of factors: "We built a lot of highway infrastructure, but we've gone almost as far as we can. After a time, the market for cars got saturated. Baby boomers are aging out of the peak driving years, from ages 20 to 50." At the same time, commute distances might have outgrown people's tolerance. "Trees can't grow to the sky and we can't drive 25 hours a day. People are making other choices with their dollars and hours. So now instead of driving to qualify (for a home loan), you take money out of your travel budget and put it in your house in a more convenient location."

The drop in driving seems likely to have some staying power, Sundquist said. Members of the millennial generation — those now ages 18 to 34 — are driving almost a third less than the baby boomers did at their age. They are delaying getting their drivers licenses and buying cars. Some of this is attributable to their high levels of school debt in an era of poor employment prospects. But even those who are working are choosing more walkable locations and opting to use their smart phones rather than drive, he noted.

#### Housing

Since the real estate bubble burst more than six years ago, the housing market has undergone convulsive change and is not likely to return to post-war "normal," said John McIlwain, senior fellow for housing at the Urban Land Institute. In that time, the homeownership rate has dropped from 69 percent to below 64 percent, and is likely to dip further, he said. Post-war sprawl was driven by middle class buyers looking for larger houses on larger lots. But today middle-class buying power is shrinking, even as production costs have risen, McIlwain said.

"For this decade, at least, suburban outer sprawl is over," McIlwain said. "The boomers moved to the suburbs 20-plus years ago, they have done that. If they move, they will not go to a further suburb, and many are looking at more urban locations." Their replacement buyers, Generation X, form a smaller cohort, "a historical aberration," McIlwain said.

The millennials are as large a generation as the boomers, but their housing future is a huge question mark. "They all say they want to own their own home, but the question is when," said McIlwain. "The first-time market is severely constrained by tighter credit." Debt burdened and facing dim employment prospects, many are unable to buy a home. At the same time, "By and large they say they want more urban environments, and hope to be in an urban-style town center when they have kids, even if it's in a more suburban location. This is the first generation since we had automobiles that has less interest in

The boomers, if they move, are looking at more urban locations.



Millennials say they want more urban environments.

owning cars and driving them. This is not the generation that will renew the outflow to the outer ring."

If and when the millennials start buying, "There is a lot of land in existing areas to develop before you go out further. There are a lot of failed suburban development projects, and much of the land has negative value now. No one will finance the big master-planned communities on large pieces of land."

#### Retail

The age of sprawl also was the age of the mall, said Lang. "Malls were a rejection of the traditional urban product," open-air Main Streets with shops at the ground floor and offices or apartments above.

Planned infill development in Bethesda Row, Md.

Courtesy of Federal Realty Investment Trust







Today, "There are no traditional covered malls under construction," he said. The replacement trend of earlier this century was the "lifestyle center, an attempt to ape the urban." Now those are pretty much done, as well, he said, "as people have noticed that actual urban is better."

Covered malls, with their shifting anchor stores, themes of the moment and ephemeral boutiques, were always expected to need periodic refreshing. "But today the re-do is to tear it down and re-build as mixed use with parking hidden away," Lang said. At the same time, an excess of suburban retail real estate is intersecting with the rise of Internet shopping to suppress demand for new retail space.

#### Developer capacity to meet shifting market demand

Last decade's housing bubble obscured a trend that may also have had a hand in deepening the effects of its collapse, McIwain said. In the aftermath of the collapse, "The closer in your property was, the closer to transit, the higher the values. Those areas recovered much more quickly," he said. Today, as development is

picking up, "more is taking place in infill, by repurposing shopping centers and pre-existing buildings. We're seeing smaller houses, smaller lots, to bring cost down in close-in locations."

These conditions reveal an underlying shift in market demand that existed before the bubble burst, but that the development industry lacked the capacity to meet until the last decade or so, Lang said. "When I was at Fannie Mae in the late 1990s, we needed to think about ways to finance development in urban places that had not seen investment in years and had no market comparables. We needed to convince people to finance mixed use, we needed more people who could design it. It seemed impossible. But now we know how to do these things again. It's now well established and well regarded. ... You'd have to unlearn a serious amount of knowledge for things to go back to where they were."

Urban-style development — whether in downtown cores or close-in suburbs — is occurring not just in regions with a long history of it, such as the Northeast, but in Sunbelt regions like Dallas, Charlotte, Phoenix, Salt Lake City and Orlando. "These are all cities in



The movements for smart growth and new urbanism resurrected the policy and design intelligence that shaped walkable urbanism.







conservative places that are succeeding with light rail and walkable neighborhoods," Lang said.

The role of policy and design movements

"In the 1950s," McIlwain said, "the white middle class wanted to leave the crowded, dirty cities, and the Levitts showed you could make a lot of money" by selling homes in suburbs in developments such as their Levittowns. "Cities are now clean, vibrant, great places to live so there's a draw to them, not a repulsion from them."

Federal policies of subsidizing highways and home loans gave the 1950s trend a shot of adrenaline, while local governments adopted single-use zoning at an accelerating clip. "Policy clearly helped drive the suburban migration and the shape that suburbia took," Sundquist said. For the last several years, he added, federal and local policies affecting development and transportation have been changing, and in some places they are driving change. "But in most cases the policies are still on the books and we have to do battle with them to get them to allow what the market demands now."

Lang gives some credit to the movements for smart growth and new urbanism for resurrecting the policy and design intelligence that shaped walkable urbanism before the automobile, and updating it for the modern era. "There are big forces at play, but the millennials wouldn't have anything to live in if people hadn't figured out how to do urban development again. They can do it because people my age and older were thinking about it in advance."

In 1967, President Johnson rolled the population clock to 200 million, and "the next 39 years until we hit 300 million was almost all sprawl," he recalled. "The next 100 million, the share that will be built up in the existing space is going to increase sharply. Our first century was about laying down a network of cities, the next period was building around them, and this one is about building within."

David A. Goldberg is the communications director for Transportation for America, a nationwide coalition based in Washington, D.C., that advocates for transportation policy reform. In 2002, Mr. Goldberg was awarded a Loeb Fellowship at Harvard University, where he studied urban policy.

# REALTORS® Take Action

#### Making Smart Growth Happen

### **MAXimizing Smart Growth in Fort Collins**

A new Bus Rapid Transit line in Fort Collins, Colo., launched in May is whisking people between the city's historic downtown and Colorado State University. But is it also strengthening communication and collaborations between REALTORS® and local leaders and helping pave the way for long-term smart growth development?

Dubbed MAX, the Bus Rapid Transit line features 60-foot, accordion-style buses, Wi-Fi and bike storage. Transit officials in this city of 150,000 estimate that MAX will help push bus ridership to over the 3-million mark in 2016, almost doubling bus use since 2000. MAX also promises to drive development along Fort Collin's Mason Corridor, expanding housing and development opportunities for years to come. REALTORS® in Fort Collins recognize how important it is for city officials and other local leaders to understand the opportunities for and challenges to future development.

#### NAR Smart Growth Poll

That's why the Fort Collins Board of REALTORS® (FCBR) has taken a proactive approach to examining the impact of MAX on community planning, housing development and consumer behaviors. Six months prior to the launch of MAX, the FCBR sponsored a tour of the Mason Corridor and brought in smart growth experts to meet with local officials. Then in February, FCBR conducted an NAR® Smart Growth poll to take a closer look at public opinion. FBCR hopes future NAR® Smart Growth grants will help address and advance issues identified in the survey.

The survey helped gauge the potential impact of MAX on transit-oriented housing and examined how public perception could affect long-term smart growth goals. The poll sought to identify possible barriers and opportunities

presented by the Bus Rapid Transit program and also create and strengthen relationships between FCBR members and other local stakeholders.

"The survey helped identify opportunities and challenges through the lens of housing and livability," said Clint Skutchan, CEO and director of advocacy for FCBR. "It has helped identify core issues and created a significant level of community and leadership understanding and awareness. It has helped build a lot of credibility with the city council and city staff."

Approximately 400 individuals participated in the survey via telephone or online in early February. The survey queried respondents about the city's quality of life; their familiarity with MAX and the Mason Corridor area; their anticipated use of the Bus Rapid Transit service; and perceived hindrances to future development.

In general, respondents really like where they live. More than 90 percent of respondents give thumbs up to Fort Collins' quality of life, with 57 percent describing it as "excellent." Most survey respondents indicated they





had some knowledge of MAX and the Mason Corridor and they recognized that MAX will bring a number of enhancements to the city's quality of life.

However younger, single respondents admitted they were least knowledgeable about MAX and the Mason Corridor. And while they knew the least, the survey indicated that young, single men were also the most likely to be regular MAX riders. The city has hired a marketing firm to help reach out to potential MAX users and Skutchan explained that the firm is using data from the Smart Growth survey to help shape its messages.

The survey also helped identify perceived barriers to development along the Mason Corridor — specifically the availability of parking and community resistance to tall buildings. Fort Collins currently limits building heights in order to maintain the city's historic views. Those public opinions have now become part of ongoing conversations about housing and future development.

"As REALTORS", we've always taken a 'protecting our housing future approach' because we understand that

housing is the underpinning of the community," said Skutchan. "The survey is helping us look at how we can help inform people about the changes that are coming and help them embrace those changes. It's helping reshape conversations on housing affordability."

#### Strengthening Community Relationships

The FCBR Smart Growth survey is proving to not only be a handy tool in helping create future community plans, but it's positioning FCBR as a go-to source for consumer data. As a direct result of the survey, local leaders recognize FCBR officials and members as experts related to housing and the development along the Mason Corridor.

"We have gotten an amazing response to this survey," said Skutchan. "We have already been in front of several organizations to present that otherwise wouldn't have had us. And the City Manager is now calling me to get on his schedule instead of the other way around. I'd say mission accomplished!"

Skutchan says FCBR's approach illustrates that REAL-TORS® are actively committed to giving back to the community. This engaged, progressive approach is also helping diffuse potential political divisiveness. Skutchan said city and community leaders now realize they can embrace smart growth issues without the constant concern about political fallout. It makes it easier for everyone to work together.

While MAX will likely help drive Fort Collins' current and future quality of life, the recent FCBR Smart Growth survey is putting the Fort Collins Board of REALTORS° in the driver's seat when it comes to understanding consumer sentiments, assisting in community planning and envisioning housing availability.

