Each year, the State Department celebrates Earth Day with a poster that underscores the importance of conservation. See the back cover for another one of our favorites.
earth day 2014
paint the town green

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Connecting the Dots

Members of the Washington-Lee High School rowing team enjoy cooling off in the Potomac River after a practice.
My contribution to this month’s *EJ*USA took me to the driver’s seat of a food truck during lunch hour, from whence I interviewed a chef/owner who hails from Indonesia. Dividing his attention between my questions and his customers, Martin Setiantoko shared a story of hard work and flexibility typical of small-business owners around the world. I learned of organizations, like the Business Center for New Americans, described on p. 15, that help new Americans navigate language and cultural differences while they build new businesses.

Immigrants own 28 percent of small businesses in the United States, a share that continues to grow. I suppose the statistic makes sense. The sense of hope for the future and the devotion to hard work that spur some people to leave home and make a life in a new country are the same qualities found in people who take an idea and turn it into a thriving enterprise.

In this month’s *EJ*USA, you’ll read about innovative ideas in America’s thriving food-truck industry, as well as ideas fueling the construction of environmentally friendly buildings, the design of better medicines and more.

–Kourtni Gonzalez

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Snapshots of America

A Year of Lopsided Portraits

The word “selfie” was named Oxford Dictionaries’ international Word of the Year for 2013. Oxford defines it as “a photograph that one has taken of oneself, typically one taken with a smartphone or webcam and uploaded to a social media website,” and its first usage traces back to 2002.

“We choose a word that has become newly prominent but that also represents the spirit of the year,” said Katherine Martin, head of U.S. dictionaries at Oxford. And the selfie? “Two or three years ago, it was extremely rare, but in the past 12 months it has become hundreds of times more common.”

So common, in fact, that in early 2014 Lake Superior State University in Michigan put it at the top of its annual list of words that should be banished from the English language.

Girls on the Run

A recent study of U.S. college students finds that girls who play an organized sport are more likely to grow up to be political candidates. Sports develop and reinforce a competitive spirit, which translates into an interest in running for office later in life, the American University study says.

Nation, States

Each year, the U.S. population becomes more racially and ethnically diverse, but the picture varies state by state. Nearly half of New Mexico’s population is Hispanic, and the majority of Hawaiians are Asian. While 38 percent of people in Mississippi are black, 94 percent of Maine’s population is white.

New Jersey most closely represents the country’s racial and ethnic composition. It’s 58 percent white, 19 percent Hispanic, 16 percent black and 10 percent Asian. (Because census respondents can report more than one race, the total adds up to more than 100 percent.)

Only six states have populations that are getting younger. Median ages vary, with Utah bounding along at 30 years old and Vermont decidedly middle-aged at 42. Washington state mirrors the country: The median age of both is 37.

Get Your Goat?

When a historic cemetery’s gravestones and picturesque trees are under attack, is it time to call in the goats?

Vines and poison ivy at Washington’s Congressional Cemetery were strangling the tall trees, which could have fallen on tombstones more than two centuries old. The cemetery could have used pesticides to clear the unwelcome plants, but the runoff might have contaminated the Anacostia River, which flows alongside the graveyard. Instead, a herd of goats from a farm in Maryland was rented. The grazing mammals, also called “nannies” and “billies,” can clear invasive vegetation like few humans, chemicals or equipment can. For one week, 58 goats happily feasted. History preserved.
Urban Farming

ANDRZEJ ZWANIECKI

Communities

Brooklyn Grange
One spring morning in 2010, a ragtag crew of two dozen people toting shovels and shears assembled in the dim light outside of the hulking Standard Motor Products Building on Northern Boulevard in Queens, New York.

Passersby who looked at them anxiously might have been wondering if the neighborhood would soon experience the annoyance that comes with road repairs.

But these workers had another job to do: build a rooftop farm. It took six days, during which a crane lifted 1,360 kilograms of soil sacks seven stories up to the roof. With the drone of traffic accompanying them, workers rolled fully loaded garden carts and shoveled soil.

That’s how Brooklyn Grange was born. Today, the rooftop farm is among the most successful U.S. enterprises of its kind and part of a trend to reclaim vacant and marginal space within city limits for growing vegetables and fruits.

From Patio to Roof

Worldwide, roughly 800 million people farmed plots in cities and their peripheries in 2000, according to the U.N. Food and Agriculture Organization. In the developing world, subsistence agriculture helps poor, urban residents to survive.

Americans typically resort to growing food in cities during wars and economic crises. The most recent turn to patio, backyard and community gardening occurs at the intersection of environmental consciousness and the desire to improve access to fresh produce. The Great Recession of the late 2000s accelerated the trend, according to Nathan McClintock, professor of urban studies at Portland State University in Oregon. He also credits the fact that “some people just like to be out in the garden, reconnecting with nature.”

Productivity of urban farms can be up to 15 times the output per hectare of rural agriculture.

Gardens are springing up in different neighborhoods across the country. Even first lady Michelle Obama started a vegetable garden on the White House lawn. But most efforts are focused on poor neighborhoods, which have vacant lots but few supermarkets. In addition to boosting fresh produce supply, gardens and farms add greenery, increase shade and absorb storm water, McClintock said. To reap such benefits, cities are changing zoning, licensing and other rules to accommodate urban farming.
Communities

For Money or Company?

Urban agriculture is unlikely to make big contributions to the overall food supply, according to McClintock. Only a few enterprises, such as Brooklyn Grange, are for-profit; most are shoestring operations that rely on volunteer labor and donations. Janette Kaden, director of the Urban Farm Collective in Portland, said survival of the operation is the first order of business. “We scavenge [for supplies and equipment], then we borrow, then we buy as a last resort,” she told McClintock’s students.

In addition to the nutritional and environmental benefits, urban farming makes it easier to connect with neighbors. Some groups involve new refugees and immigrants in growing vegetables and fruits in their communities to help them meet others and take root in their new country.

More and more city schools are embracing gardening as an educational tool. Because urbanization has caused a disconnect between the farm and table, urban gardens are a vital way for Americans to re-engage with the food system.

City slickers are also bringing insects and farm animals — bees, chickens, ducks and mini-goats — into their backyards or gardens as some cities soften bans on raising them in residential or commercial areas.

Today, chickens and bees are part of the Brooklyn Grange rooftop farm, which successfully sells vegetables, eggs and honey to restaurants and retailers. With a location added to its Northern Boulevard rooftop farm, the company’s production has more than doubled since the first planting season, according to Ben Flanner, the head farmer. Though urban farming is seemingly miniscule compared to large agribusinesses, Flanner said, he hopes it will “create a ripple effect, a tidal shift in our cultural understanding of what it means to be farmers and eaters.”

I say tomatoes, you say tomatoes in Hartford, Connecticut.

Free range in the city? They cluck “yes.”
Sports Lead in U.S. Schools

FRED BOWEN

When students from abroad come to the United States, they often notice that sports are a big part of American secondary schools. More than half of all secondary-school students play a sport at school, a share that has been increasing for 24 consecutive years.

Unlike in many countries where teenagers play informal games or for community teams, in the U.S. teenagers play sports on teams organized and funded by their schools. “Representing McLean [High School] at track meets is a more fun aspect of school,” said Kathryn Howley, who runs cross country and track at the public school in Virginia. She said she has enjoyed making great friends, whom she also sees in her classes.

According to the National Federation of State High School Associations, more than 7.7 million American secondary-school students, nearly half of them girls, participated in school sports during the most recent school year.

Perhaps this is why 90 percent of exchange students to the U.S. said in a recent survey that American kids care more about sports than do their peers in other countries.

The diverse nation also offers a wide array of school athletics. U.S. students not only play popular sports such as American football, track and field, and basketball, but also can choose from such disciplines as lacrosse, rowing, competitive cheerleading and bowling.

In the U.S., “game night” doesn’t always mean gathering in a crowded gym to watch your school’s basketball team. This past season, a giant sports cable-television network, ESPN, nationally televised 26 secondary-school football games. Another national channel, Fox Sports 1, televised seven such interscholastic football games.

For years, USA Today, a national newspaper, has published rankings of secondary-school football teams, as well as secondary-school boys and girls basketball teams.

Setting Priorities

Some people, however, have begun to question whether this perennial preoccupation with sports is good for American students.

In a recent article published in the Atlantic, Amanda Ripley, author of The Smartest Kids in the World — and How They Got That Way, proposes a different emphasis: “Imagine, for a moment, if Americans transferred our obsessive intensity about high school sports — the rankings, trophies, the ceremonies, the pride — to high school academics.”

Ripley reports that, on average, some secondary schools in the United States spend twice as much money per football player and four times as much on each cheerleader as they spend on each math student.

School sports, however, have many defenders. A 2007 study by the Minnesota State High School League found that athletes had slightly higher grades and were less likely to miss school than nonathletes. According to Howley, supportive teammates just make everyday school life better. She recounts one race in which a girl on her team was having a tough time. “She didn’t want to keep going, but teammates encouraged her and ran with her to the end. She had a happy, even elated look on her face when she crossed the finish line. While she wasn’t the best on the team, this girl still came back for the next track season.”

Girls in particular appear to benefit from playing sports. The Women’s Sports Foundation points to studies indicating that secondary-school girls who play sports are more likely to get better grades and graduate, and less likely to become pregnant while in school, than girls who don’t play sports. Young female athletes also have more confidence and a better self-image. “Running has forced me to develop independence,” Howley said. “My coach isn’t going to be there for me ‘24/7,’ so I take care of myself and get to the starting line on time, already warmed up.”

While debate continues over whether schools put too much emphasis on sports, chances are that they will remain what they are in America today: a very big deal.
Good Sports
Two athletes share their respective sports.

rebecca yohannes
Washington-Lee High School
Arlington, Virginia
Coxswain (steers boat, manages rowers) for the rowing team

“Rowing gives me a sense of purpose that I wouldn’t have by just being a student. It gives me a community. I’m almost always with my teammates: for practice, at races or when we are raising funds. From Monday to Saturday, November to May. Some people call rowing a cult, and I’m all right with that.

As a coxswain, it is my job to relay the coach’s instructions to the rowers. Once, when we were not executing a drill correctly, we stopped, frustrated. I told the rowers to get in the zone, get mad and pull the oars as hard as they could. On their next try, they rowed faster than they had all season. It was one of the best feelings! Now, if the team is having a hard time, I say, “Think back to that drill and what you did to get it right.” They respond.”
devonta high
Frederick Douglass High School
Upper Marlboro, Maryland
Defensive back and wide receiver for the football team

"I love the competition, the practices. During the season, there are times you really don’t want to go to practice. After it’s over ... dang! You have memories. You laugh about something the coach said. You miss it. I am graduating soon, and I already miss it.

I have had excellent coaches, and when I am on the football field, I have fun. Soon I will go to college, where I want to major in business or religion ... and where I will play football."
First Responders: Heroes and Athletes

LAUREN MONSEN
For two years, Thomas Black has been getting up before dawn to swim and work out — the rigorous training of an athlete preparing for international competition in freestyle and backstroke swim events.

“I want the gold in the 50-meter and 100-meter freestyle; I need something to justify getting up at 4 a.m.,” he joked.

Black, of the Fairfax County Sheriff’s Office in Virginia, is among 12,500 active-duty and retired police officers, firefighters and other public-safety professionals from 70 countries competing in the 2015 World Police & Fire Games.

As an international, multisport, multivenue competition, they rank behind only the World Masters Games and the Summer Olympics in number of participants.

Launched in 1985 by the World Police & Fire Games Federation, a nonprofit run by the California Police Athletic Federation, the games — spanning 10 days — are held biennially in odd-numbered years. The 2013 games took place in Belfast, Northern Ireland; the 2015 games will be hosted by Fairfax County, just outside Washington, from June 26 through July 5.

Maureen O’Neil, of the Ottawa Police Service, will compete as a bodybuilder in the 2015 games. She hopes to finish in the top five, while “making new and interesting friends, and sharing stories with other brothers and sisters in blue.”

Chris Darragh, a prison officer in Northern Ireland who competes in ice hockey, called the games “life-changing.” He made friends from all over the world, including “people from Las Vegas, Reykjavik, Toronto and here in the U.K.”

These friendships underscore the games’ underlying purpose: to strengthen cross-border ties among first responders, promote volunteerism and physical fitness, and serve as a recruiting tool for public-safety agencies.

Craig Luecke, director of communications for the 2015
games, said corporate sponsors provide most of the funding, and proceeds from ticket sales benefit local charities in the host cities.

Among the 61 sports included in the 2015 games are archery, basketball, hockey, swimming, rowing and volleyball. Most sports are open to any eligible competitor, but a few are earmarked specifically for either firefighters or police officers.

Firefighter sports include the stair race, which demonstrates the speed and agility required to save people trapped in tall buildings. Police sports include a motorcycle race as well as a service-dog event that tests the skills and training of K-9 unit members and their handlers.

Visiting athletes will be onstage during the televised broadcast of “A Capitol Fourth,” Washington’s annual July Fourth concert near the Capitol Building. To top it off, athletes will be honored at a barbecue reception on the grounds of the Pentagon before a fireworks show.

“These games are all about these incredible athletes, and we want to give them the experience of a lifetime right here in our nation’s capital during the Independence Day celebration week,” Luecke said.

The 2015 games will likely attract 30,000-plus spectators, requiring lots of volunteers to help with the event, said Pete Elias of the Vienna Police Department in Vienna, Virginia. Elias is entering the games’ bench-press competition, but he’ll be doubling as a volunteer.

“It’s more than just a community... it’s family.”

Teela Cumberworth, a rescue officer from Australia, will also be volunteering in Fairfax County. “I try and explain [that] it’s more than a community,” said Cumberworth, when asked why she’s so passionate about the games. “It’s family.”
Applications of tiny bits of matter in medicine promise breakthroughs in diagnostics and treatment for major diseases, but they won’t become available in doctors’ offices or hospitals near you anytime soon.

These potential cures, collectively known as nanomedicine, take advantage of matter properties that are evident only at an atomic or molecular level. Particles from 1 billionth to 100 billionths of a meter in size can be used to help diagnose an illness faster and more accurately and administer medicines directly to the diseased cells, according to medical experts.

“These drugs would be available in the body only where they are needed,” said Edward C. Lawrence, professor of finance at the University of Missouri at St. Louis. The improved effectiveness and efficiency that nanomedicines promise could ease the burden on health care systems because patients’ health could improve with fewer medications and hospitalizations, he writes in his blog RxObserver.com, which focuses on the economics of health care systems.

**Targeted Treatment**

Doxil, the first nanodrug to treat different types of cancer, was introduced in the United States in 1995. Since then, more drugs based on relatively “simple and straightforward” applications of nanotechnology have been approved, according to Jeffrey McCullough, a professor of laboratory medicine at the University of Minnesota in Minneapolis.

Now, hundreds of companies, universities and medical centers are working on more complex and potentially more effective nanomedicines, medical imaging and diagnostic techniques and other applications.

Nearly 250 nanomedical products are in use or in clinical trials worldwide, according to a 2013 study by the Department of Biomedical Engineering at the University of Minnesota. McCullough was a co-author of the study. Most tests have been administered only to animals so far. Although the products represent significant technological advancements, “they are only scratching the surface of the potential,” says the study.

In the future, nanomedicines may take the form of novel compounds or of delivery vehicles for existing medicines such as chemotherapeutic drugs. The most advanced nanomedicines would work as microscopic robots. Once inside the body, they would identify a disease, deliver a drug directly to its site and monitor the treatment’s progress while evading the body’s immune system to prevent adverse reactions.

Many researchers view nanomedicine as having great potential for improvements in cancer treatment. Nearly 120 cancer drugs are being developed by pharmaceutical companies or university labs, according to data from Thomson Reuters Pharma. “Cancer therapy is probably the most exciting [application] and promises the most dramatic breakthroughs,” McCullough said.

**Nanobarrier**

The field of nanomedicines is still in its early stages. Experts claim that the largest obstacle to the mainstreaming of nanomedicines is toxicity. Nanomaterials have unique properties that make assessing their toxicity challenging, according to W. Shane Journeay, a Toronto-based physician and nanotoxicology consultant. He said it is possible that toxicities may occur in a different fashion than in traditional medicines.

Still, experts believe research will improve scientists’ understanding of toxicity and overcome other barriers. “The future of nanomedicine is incredibly powerful,” said Omid Farokhzad, a professor of medicine at Harvard Medical School, at the first international nanomedicine conference at Northwestern University in July 2013. □ –A.Z.
Marketplace

LUNCH IN NEW YORK

NEW YORK HAS THE highest concentration of food trucks IN THE COUNTRY

96% share of NY food-truck owners who are immigrants

MOST COMMON CUISINES ARE

EGYPTIAN
BANGLADESHI
MEXICAN
ECUADORIAN
CHINESE

ICE CREAM TRUCKS are the most popular type of food trucks in New York

Food trucks make up nearly 15% of New York’s food-service industry.

ON ANY GIVEN DAY, THERE CAN BE AS MANY AS 400 FOOD TRUCKS PARKED ALONG NEW YORK’S STREETS.
Immigrants Drive This Food Trend

KOURTNI GONZALEZ

While studying for a law school entrance exam one afternoon in 2008, Deepti Sharma Kapur could no longer ignore the grumbling of her stomach. She decided to make a quick snack run, but her face fell at the sight of a long line at her favorite food truck. Reluctant to waste time waiting in line for food when she could be studying, she left hungry.

She began that moment to craft a long-term solution to her dilemma. In June 2011, after a few years of collaboration with technology gurus in India, she launched FoodtoEat.com, a website that allows busy, hungry people to pre-order from food carts, eliminating the need to wait in line. Although Kapur had no background in business, she said, “at the end of the day, I’m a consumer. I confronted a problem I wanted fixed.”

As her business took off, Kapur noticed that many of the food truck owners she worked with were immigrants and that they faced unique challenges — from an unfamiliar language to economic barriers. Because she wanted to help, she expanded her business model and started mentoring her clients on how to use technology to grow their customer base. She now serves on the board of the Business Center for New Americans, a nonprofit organization that helps immigrants start businesses by offering them microloans and business management workshops. According to the center, restaurants make up one of the largest groups of small businesses, and new business owners are attracted to food trucks as a less-expensive alternative to brick-and-mortar locations.

One Man’s Customer-Driven Cooking

Martin Setiantoko came from the other side of the world to start his business. He attended culinary school in Malang, Indonesia, and had dreamed of opening his own restaurant. He immigrated to the United States when he was 24 years old and vowed to try his luck in the restaurant business. Arriving in New York with only $150 in his pocket, he had a tough start. He had no family in his new country to help him get established, and he struggled to support himself on a dishwasher’s wages. He set aside a small part of his paycheck every month for almost five years until he had enough to open a restaurant. He chose to do it in Virginia.

The hardest part was getting started. Within the first six months, he said, “I’m broke financially, and my body is hurting because I work so much.” Three years later, he finally saw a profit. He expanded his business to include two food trucks. That decision, he said, has paid off, as the majority of his income now comes from his trucks.

Increasingly, young professionals buy lunch curbside in the nearby city of Washington. Setiantoko’s trucks have allowed him to bring his menu to where the customers are. He didn’t just park his truck and sell. He took his cooking outside, preparing what he considers his best dish, saté — a popular Southeast Asian dish of grilled meat served in a sauce — in the open to entice people with its aroma. It was almost all of the publicity he needed. “That’s the beautiful thing about food trucks,” he said. “You don’t have to do the marketing.”

Today, Setiantoko still has big challenges, which he defines as space and time. He runs his restaurant and trucks out of one kitchen and divides his time among the three locations. Business ownership is stressful, he said, but it’s worth it “to see a long line of people waiting to try my food.”

Deepti Sharma Kapur, CEO of FoodtoEat.com, shares the story of her transition from law student to business owner.
What’s Your Story?

SASHA INGBER

In the autumn of 1973, Jimmy Neil Smith, a former journalism teacher and mayor of Jonesborough, Tennessee, wheeled an old hay wagon into the Courthouse Square. It became the stage for storytellers, with a few neighbors seated in chairs on the street as the audience. Forty years later, the quiet mountain town’s National Storytelling Festival receives more than 10,000 visitors who sit under circus tents and listen to the cadence of the human voice for one weekend.

Down the tree-lined street lies the first facility in the world devoted solely to the tradition of storytelling: the International Storytelling Center. “We’re interested in helping people learn how to capture their own stories,” said director of programs Susan O’Connor. “Storytelling is at the heart of the human experience.”

Americans may typically think of stories as best told around crackling campfires or on stoops, porches and benches, but the oral tradition is also evolving with technology. “We’re living in a time when people can share information in a variety of ways. Oral history will find ways of emerging from new technological avenues,” said Jeremy Helton, an associate manager of one of the world’s largest oral history projects, StoryCorps.

The nonprofit started with a soundproof recording booth in New York’s Grand Central Terminal. People passing by were invited to enter the “StoryBooth” in pairs and interview each other for 40 minutes. A trained facilitator would oversee the recording and ask questions if conversation waned.

Since 2003, more than 90,000 people have been interviewed in booths, at home and even in the back of Airstream trailers that travel thousands of miles every year in search of stories. In the trailer, a booth with dimmed lights, a table and two microphones awaits guests. “At some point the mic just kind of disappears,” said Helton. “People have this look on their faces like they didn’t know that they had been waiting to tell their story.” Every storyteller receives a CD of the conversation and can choose to have a copy preserved at the American Folklife Center at the Library of Congress.

Ignite, a self-proclaimed “fast-paced geek event,” also makes use of technology in its talks. Each presenter speaks for five minutes, timing the talk with slides that advance every 15 seconds. “The structure helps people navigate,” said Raoul Encinas, a speaker and volunteer for Ignite Phoenix. No topic is off-limits, he added, which makes for a diverse evening. “We want to curate stories that create a feeling of community,” he said.

During his talk “Fantasy Football Saved My Life (*But I’m Still Going to Die),” Encinas explained how a game in which Internet users compete as virtual managers of real football players (“Dungeons and Dragons for jocks”) helped him withstand grueling treatments for a cancer so rare that even his primary oncologist hadn’t heard of it. On stage, Encinas described being bolted to a table with a mask and tongue suppressor for 40 minutes every day for weeks — slides of a thin, burned and hairless version of himself accompanying his words. The audience clapped loudly and voiced their support.

“There is this commonality we find in connecting to other human beings,” said Encinas. “It makes you realize how similar we are. Especially when thinking about breaking down barriers.”

A common thread runs through storytelling initiatives, both traditional and contemporary: the belief in the power of human experience to connect us, no matter how routine or rare.

“Is there anything you want to say to your great-great-great-grandchildren when they listen to this?” StoryCorps offers as a possible interview question. It’s one way to start a conversation. And answering a question like that makes storytellers out of all of us.

They are not all life-changing stories, but they’re all meaningful.”

— Raoul Encinas

By the Numbers

| StoryCorps | 33,754+ HOURS OF AUDIO RECORDED | 54 LANGUAGES REPRESENTED |
| Ignite | 150+ CITIES WORLDWIDE HOST EVENTS | 200+ PEOPLE STREAM EVENTS ONLINE |
The Seed for StoryCorps

In 1993, StoryCorps founder and radio producer David Isay set out to record stories of people living in housing projects on Chicago’s South Side. He met LeAlan Jones, 13, and Lloyd Newman, 14, who struck him more as interviewers than subjects. He gave them recorders, and they taped their daily lives for 10 days — in the hallways of their school, on the bus, at home with family and friends. “When Isay heard the recording, something crystallized,” said Jeremy Helton. The kids captured something a person outside of the community couldn’t. Ghetto Life 101, their audio diaries, won almost every major award in American broadcasting.

StoryCorps’ most recent book, *Ties that Bind: Stories of Love and Gratitude from the First Ten Years of StoryCorps*, highlights some of the most powerful stories collected over the past 10 years.
Saving the World’s Treasures

Since its inception 13 years ago, the U.S. Ambassadors Fund for Cultural Preservation has contributed millions of dollars to preserve cultural sites and objects, and traditional forms of expression, worldwide.

These projects include the restoration of buildings, conservation of manuscripts, protection of archaeological sites and documentation of vanishing crafts. The preserved sites and objects are all testaments to the experiences of humanity. □ –L.M.

Explore!

Learn about the U.S. Ambassadors Fund in the book *Priceless.*

http://goo.gl/Fvqy6l

Mexico

The Tepeyahualco Arcade is among the features of the 16th-century Father Tembleque Aqueduct. Soaring above the semiarid plains of Hidalgo in central Mexico, the aqueduct — constructed over 16 years with 400 local laborers led by Franciscan Friar Francisco de Tembleque — is stunning both visually and architecturally. The aqueduct is considered the 16th century’s most important work of hydraulic engineering in the Americas.

The Church of the Holy Redeemer in Turkey will be featured in next month’s issue of EJ|USA.
Paint the Town Green

American cities, their residents and their businesses are improving the environment one building at a time.
Civic Pride Intersects with Environmentalism

Cities, though crowded by people, cars and buildings, lead U.S. environmental efforts. They have become labs for policies designed to mitigate climate change, arrest suburban sprawl and reverse environmental degradation.

Leaders among environmentally conscious municipalities address these issues by retrofitting and constructing buildings to be energy-efficient; by expanding public transportation and introducing nonpolluting trains and buses to curb greenhouse-gas emissions; by offering tax incentives for businesses or residents to switch to renewable energy; by preserving farmlands and green spaces; and by recycling trash.

Some policy and technology experiments fail, said Suzanne Malec-McKenna, Chicago environmental commissioner in 2007–2011. But those that prove feasible often get implemented on a larger scale, improving the environment in an entire state or region, she said.

Local governments are well-suited to fix environmental problems; they make their own, distinctive policies and control budgets. They also are smaller, less bureaucratic and closer to constituencies than national or international institutions, say Tommy Linstroth and Ryan Bell in their book Local Action: The New Paradigm in Climate Change Policy. The greater efficiency of city governments allows cities the flexibility to adjust policies mid-course if necessary.

Approaches to sustainable environmental practices differ, but leadership by mayors and dedicated resources (i.e., budgets) are common characteristics of the municipalities making the greatest strides, according to Linstroth. Engaging businesses and residents also matters, he said.

Municipal leaders use regulations, incentives, investments and public outreach to implement their environmental agendas. Wade Crowfoot, who has worked on the San Francisco mayor’s and California governor’s environmental initiatives, said city and state leaders have been willing to try novel approaches.

In these pages, visit a few cities that stand out because of their environmental efforts. □ –A.Z.
During recent years, Chicago city officials and residents planted half a million trees.

In 2001, Chicago pioneered a rooftop garden atop the 11-story City Hall. Today, Chicago boasts 418,000 square meters of high-rise greenery. Rooftop gardens save energy, help control rainwater and ease unnatural temperature spikes in compact urban centers. More than 120 environmentally sustainable buildings, many with green roofs, make Chicago a national leader in green building.
Portland, Oregon, boasts the highest percentage of bicycle commuters of any large U.S. city.
City residents enjoy not only one of the most extensive networks of bikeways in the country — more than 500 kilometers — but also can count on a city bicycle coordinator, free cycling maps, ample parking, and even a bike-through window at a fast-food restaurant. Some employers offer workers incentives to bike to work. The conveniences and incentives have produced an almost fivefold increase in the number of bicyclists in Portland since 1990.
From a declining industrial metropolis with steel mills spewing black smoke and soot into the sky, Pittsburgh has transformed itself into a vibrant green city. Thanks to collaboration among city leaders, labor, business, academia and nonprofit groups, clean-energy projects and startups drive a new economy, creating well-paid green-collar jobs.
PITTSBURGH

The Pittsburgh-based PNC Financial Services Group is building what it hopes will be the greenest skyscraper in the world.
As a result of federal and state automobile emission standards, cars and buses emit fewer pollutants. Local regulations, forcing higher energy efficiency and environmental features for commercial buildings, also reduce air pollution. The building at right, in Hollywood, won the highest environmental certification of any building in Southern California.

Still, city leaders know they must do more to improve air quality.
The city suffers fewer days of smog, or “red alert,” than it used to. Its ozone pollution and harmful-particle indicators have declined over the past few decades.
NEW YORK

The five boroughs that make up the Big Apple are home to one of the most environmentally friendly transportation systems and land-use regimes in North America. More than half of the city’s bus fleet runs on alternative fuel. Through redevelopment of post-industrial sites and vacant lots, New York has also expanded its green spaces. It has improved its air quality by replacing heavily polluting heating oils with cleaner fuels. Its carbon dioxide emissions per capita are lower than those in other U.S. cities.

New York has the largest share of residents who think and act eco-consciously among major cities.
Kerri-Ann Jones is assistant secretary of state for oceans and international environmental and scientific affairs. Dr. Jones is a scientist by training — a biochemist.

*Earth Day is a great time to reflect* on the progress we are making to protect our environment and live more sustainably. As assistant secretary of state, I’ve seen firsthand the difference that a healthy environment can make in communities and cities around the world.

As we focus this Earth Day on green cities, it’s important to remember the intimate connection between our cities and our oceans. Three-quarters of the world’s largest cities are by the sea, and more than one-third of the world’s population lives in coastal areas. Covering almost three-quarters of the planet, oceans regulate our climate and weather and are essential for cycling water, carbon and nutrients. More than 1 billion people, many in the least-developed countries, rely on fish as their primary source of protein.

But the oceans are in trouble. Many fish stocks are declining, some to the point of collapse. Corals are dying in many regions, leaving skeletons of reefs, which can’t support fish or protect coastlines. Run-off from land and harmful algal blooms are sapping the oxygen from marine waters. Our oceans are becoming littered with debris and becoming more acidic from carbon dioxide.

The good news is that we can do much to address these challenges. Advances in science, new community initiatives and new government policies are working toward solving big and small problems. These efforts are demonstrating that we can set a sustainable course for the oceans. However, we still face many challenges. These are not the isolated challenges of one community or one country but will require individuals, communities and nations to work together to make a difference. Solving a problem that spans the planet will take hard work, political will and help from you. As one step in the right direction, later this year Secretary of State John Kerry will host a conference of leaders and experts from around the world to draw attention to the threats facing the oceans and to identify potential solutions.

The oceans and their resources are critical to everyone’s well-being. This Earth Day, please join me in working to chart a sustainable future for our oceans.
Each year, the State Department celebrates Earth Day with a conservation-related poster. Here is one from an earlier year. See the inside of the front cover for this year’s poster illustration.