and jobs? And does it account for unseen, cumulative negative externalities, like increased pollution, childhood obesity, and isolation of the elderly?

An example of a project that brings many of these factors together is an ongoing one that Douglas initiated while he was still director of the Urban Design Center in Raleigh, N.C., before joining KlingStubbins in March 2009. Douglas’s vision of Raleigh’s future would be facilitated by combining the resources of several of the city’s major property owners and managers—two utilities, three railroad companies, Wake County, and the city itself—in the establishment of a nonprofit development corporation similar to the one that developed Research Triangle Park a half-century ago.

The development corporation would be responsible for implementing a master plan for downtown development that would like include new public squares, arts and cultural hubs, significant development of affordable housing, high-technology business complexes, and transit stations. Douglas sees this plan leading to a doubling of jobs in downtown Raleigh over the next two decades and an increase in the population there from less than 3,000 today to 30,000 people.

The biggest challenge to making planning greener than it is today is “the inertia behind the old paradigms,” says Douglas. “Cities change slowly. Unbridled road building, limited transit funding, easy mortgage financing for housing on the far edge of metropolitan areas and the consequential sprawling of southern cities will take decades to overcome.

“The good news is there is a growing realization that the current recession, economic globalization, peak oil, and climate change are interrelated... People are looking for a more simple and sustainable lifestyle. Planners can help them realize that goal.”

Ensuring that plans get implemented and don’t sit on the shelf means focusing on “the economic benefits of every plan we undertake,” says Douglas. “Drawing out those benefits seems to make the implementation more effective. We refuse to write plans that sit on the shelf.

“The other key to successful implementation is the planning process. The process has to build a constituency for implementation. You have to show how the proposed changes will impact the life of individual people and families. If it is not clear and meaningful, people won’t support you. You need advocates at council meetings to ensure the plans objectives are met. Token participation will not create advocacy.”

FOR GREEN PLANNING TO TAKE OFF, DEWBERRY LOOKS FOR BETTER MATCH BETWEEN REGULATIONS AND MARKET DEMAND

O n the one hand, the planning profession has been “green” for a good many years, dating back even to the 1970s when landscape architect Ian McHarg wrote Design with Nature, according to Dan Anderton, senior landscape architect and planner at $330-million architecture, engineering, management, and consulting firm Dewberry (Fairfax, VA).

“Generally, ‘planning,’ in terms of land planning, has been green for many years; a combination of stormwater regulations, forest conservation regulations, and smart growth in many jurisdictions has provided for green development,” says Anderton. Inspired by visionaries like McHarg, “planners with landscape architecture backgrounds have been taught to concentrate on making developments respond to the elements of grade, stream valleys and runoff, forest and conservation, erosion and soil makeup, passive and active solar design, and other considerations for keeping and preserving our environments.”

Many of these considerations have become commonplace in site engineering and architecture, with some embodied in legislation and others in principles of sound practice, according to Anderton. Indeed, “the largest impact that green is having now is on architecture,” as sustainable design techniques, including material reuse, green roofs, and more “change the way builders and developers think of architecture and its impact on the environment,” he says. Green planning, design, and engineering practices have been in place sufficiently long to demonstrate measurable reductions in soil erosion, chemical releases, and forest clearing compared with prior practices, he adds.
On the other hand, planning and design have much further to go before sustainability is truly entrenched in development, Anderton argues. The reason, in his view, has a lot to do with a lacking of synchronization between regulatory systems and market demand. “Until the jurisdictional regulations and the mental mindset is such that a brownfield development is as economically feasible as a greenfield development, developers will choose greenfields over brownfields,” he says.

Anderton offers Montgomery County in Maryland, home of the Gaithersburg office he manages, as an example of the disconnect between regulation and the market. Sensibly encouraging development and population growth around rail stations, the county nonetheless has stormwater management and forest conservation regulations that require the same amount of land to implement these protections on a brownfields or urban infill site as on a more suburban or rural greenfield site. Yet the brownfield site doesn’t have that volume of space, and to meet the regulations, the development may need to be more dense than is economically feasible.

The price of a building unit escalates in terms of vertical construction costs, he explains. “With four stories or fewer, you can do wood construction, but above that, you have to go concrete, and the construction costs double.” That doubling in costs has to be made up in the prices of the finished units to market.

“The solution is to redesign the regulations so that there are different rules for brownfields than for greenfields,” Anderton concludes. To Montgomery County’s credit, he adds, the zoning codes are being rewritten such that they could correct some of these problems. In the meantime, however, truly green development is hampered, in Montgomery County and elsewhere.

Where it is unconstrained by these types of out-of-sync conditions, Dewberry is a vigorous promoter of green planning. “We have learned through experience that planning projects best served when all aspects of ‘green’ are considered.” These aspects include sustainable stormwater management and conservative forest conservation along with smart-growth ideals.

Of Dewberry’s 1,800 employees at 40 offices in 17 states, 20 professionals are certified under the American Institute of Certified Planners (AICP) program, and 165 are accredited under the U.S. Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) program. The company generated $329 million in gross revenues for 2009. Anderton reports that “requests for LEED and green-sensitive planning continues to increase, and we see the demand continuing to grow in all of our markets.”

Dewberry’s planning practice serves a broad cross-section of clients in the public and private sector, including developers, municipalities, departments of transportation, water and wastewater authorities, and architects. Master planning, conceptual planning, and architectural design projects range substantially in size and consist of all types of mixed uses, including commercial, office, residential, medical, educational, and industrial facilities, as well as roads and highways, stream valley restoration, stormwater management, and forest conservation.

Anderton sees a steady advance of green prerogatives in planning and design, undimmed by the recession. “In spite of a slowing economy, green awareness continues to grow among the clients we serve. As costs of green design and materials become more affordable and economically viable, the transition to green design has been occurring at a steadily increasing pace. The development of green legislation throughout the country is fueling the fires of change in the market, which in turn is fueling the need for innovation in creating alternative approaches to design, engineering, and construction. These alternative approaches help make projects more economically viable in a currently depressed market.”

A recent example of Dewberry’s innovation in incorporating sustainability principles into core objectives is the company’s plan for a new Army Testing and Evaluation Command headquarters at Aberdeen Proving Ground in Maryland. Part of a mission realignment under the Base Re-alignment and Closure (BRAC) program, the new site and headquarters was slated by the Army for LEED Silver certification, and Dewberry achieved LEED Gold, according to project manager Arlie Ison.

Integrating water quality and quantity goals with anti-terrorism force protection requirements, Dewberry resorted to grassy swales instead of the usual concrete posts to deter vehicle approaches to the building. “The grass swale treats the quality of the water and prevents a vehicle from getting up to speed,” notes Ison. The use of swales and microbioretention areas to treat stormwater runoff was important in a broader sense because the runoff at the 20-acre site drains into the severely impaired Chesapeake Bay.

Other design features earning LEED points include extensive landscaping using hardy, drought-tolerant native plants that, once they are stabilized in about a year, will survive without irrigation. In addition, says Ison, the parking lot had no curbs and used depressed swales in place of raised medians to collect and treat runoff.

Acknowledging that some plans sit on the shelf and are never implemented, Anderton stresses that such inertia has nothing to do with sustainability and everything to do with economic conditions. “Currently, builders and developers are making decisions on whether to proceed on a project based on funding, and having their projects ready when the market turns,” he says. The same is true for public projects.

“Dewberry value-engineers all of its projects, and has helped to value-engineer other projects,” says Anderton, “so that when projects are ready to proceed, they are well-designed and cost-effective... with phasing and staging done in a way that give maximum value and return for the clients, which, in turn, translates into savings for future owners.”

It all comes back to better matching existing regulatory regimes with the demand for green, Anderton concludes. “More concentration needs to be put into achieving sustainability through means that do not take away buildable land in urban areas. An increase of buildable land would allow enough density to make more expensive vertical construction types, including green, affordable and desirable.”