



Urban Land - May 2005 - Feature

Telecommunities

by Nicholas Slabbert

La Plata, Maryland, could be transformed into a prototype of America's new telecommunity.

La Plata, Maryland, has a history shaped by technology. It originated in 1888, after the Pennsylvania Railroad Company was authorized to build its tracks and station in the heart of tobacco country. Then, as tobacco farming ebbed, the advent of modern highways allowed La Platans to secure new jobs far from the town. Today, many of its 8,400 residents work in Washington, D.C., driving 30 miles twice daily on increasingly congested roads. It is typical of a number of once-rural small towns that time and highways have gradually turned into bedroom communities.

Now a technological revolution offers La Plata a chance at rebirth—and a place in future textbooks. A proposal at the U.S. Department of Homeland Security (DHS) could transform the town into the prototype for America's new wired suburb: the urban "telecommunity." DHS needs to restructure its National Capital Region (NCR) workforce. Central Maryland Development Inc., a business that sees profit in revitalizing small towns, has offered a solution — bring DHS to La Plata, but as a federal operation with a difference. The plan is to make DHS virtual and distributed — a fiber network of staff wired to D.C., doing most if not all of their jobs through the Internet, from homes and telework centers in and around La Plata, a sister telecommunity in Virginia, and elsewhere.

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Schematics like the one above enabled La Plata's citizen-driven vision team to reimagine how the town could meld new roads, a railroad station, government buildings, and new commercial and residential structures together into a pedestrian-friendly village. The vision plan also provides for the texture and scale of La Plata's town center to merge with existing housing to create a public-and-private town center (right.)

Four secure fiber-optic networks intersect in La Plata, so a broadband fiber grid for telework could be created immediately, says Central Maryland Development Inc.'s president, architect/planner Alan Feinberg. "It's a concept whose time has come. Railroads and highways altered the nation's landscape by changing work patterns. Now telecommunications are poised to change our small towns," he maintains. "It's the end of the era of bedroom communities. These will be progressively converted into balanced, renewed, fully functional neighborhoods empowered by the Internet."

While some urban theorists may equate technology with dull uniformity, anonymity, and an eroded sense of distinctive place, Feinberg's plan expressly requires La Plata to reclaim its unique small-town character. Devastated by a tornado in 2002, it has steadily recovered with the guidance of a "vision plan" crafted in the three years preceding the tornado by a team assembled by Feinberg and led by Virginia-based planner Milton Herd. The vision plan proposes the creation of a pedestrian-friendly LaPlata working around an old-fashioned town square. This, says Feinberg, is exactly what a high-tech telecommunity demands.

His rationale, drawing on multidisciplinary research, can be summarized, he says, as the hardware/software approach to urban design. To become an economic engine today, a town, like a computer, needs hardware and software. The hardware includes a broadband Internet grid. The software is urban identity: the cluster of unique environmental features that attract sophisticated people wanting to socialize and network—in short, experience of place.

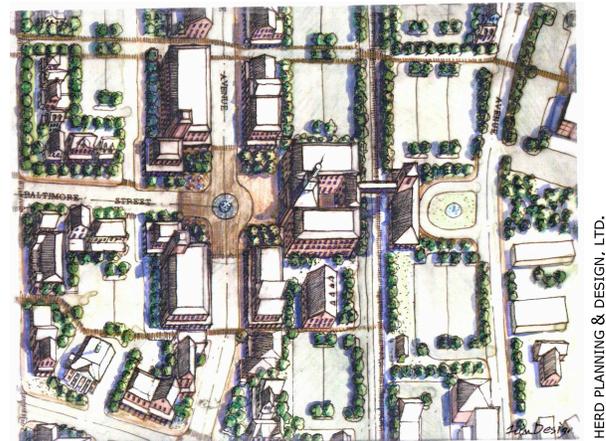
"La Plata doesn't have this yet," Feinberg acknowledges. "But its vision plan shows the way. The plan converges

fourtuitously with the DHS opportunity. And many D.C. workers already live in and around La Plata."

The telecommunity project has won support since going to DHS in late December. When **Aris Melissaratos**, Maryland's secretary of business and economic development, read it, he E-mailed **Tom Lockwood**, DHS's director of NCR coordination, hailing it as "a great idea" able to boost the region's economy and provide "an alternate path" for DHS functions while "showcasing" the NCR.

Feinberg values Melissaratos's support not just politically, but also because of Melissaratos's scientific background. "To understand this project fully, you must know technology. We're glad the secretary has a master's degree in engineering. And it doesn't hurt that he's been vice president of science and technology for Westinghouse, on the national advisory council of Johns Hopkins Engineering School, and on the board of Maryland's technology council."

Elaine Ryan, president of the College of Southern Maryland, says she likes Feinberg's call for a federal telework center near the campus, using CSM technology training and research services. She has told Lockwood she sees "significant benefits" for the region.



"This makes sense in a variety of ways," says economist **Richard Clinch**, director of economic development at the University of Baltimore's Jacob France Institute. "Community colleges are being steadily integrated into regional development as skill providers."

DHS's human capital (personnel) function has held an initial meeting with Central Maryland Development Inc. and is now briefing other DHS offices with a view to a full-scale presentation of the project. "Like any big federal decision, this will likely involve months of discussion," notes Feinberg. "But we're sure that once we walk them through the logic, they'll see it as natural, efficient, and necessary."

The project's timing benefits from two related facts. First, DHS needs a high-security, "24/7" staff solution. Second, Congress is pressuring federal agencies to embrace the concept of telework—a pressure intensified by growing

security concerns. According to the most recent telework report published by the U.S. Office of Personnel Management (OPM), less than 2 percent of eligible DHS staff telework, says **Chuck Wilsker**, president of the Telework Coalition, a Washington, D.C.-based research group. An OPM report issued in 2004, covering 74 agencies employing more than 1.7 million, showed that 6 percent of federal employees work from home or a telework center at least once a week. These figures do not sit well with congressional federal telework demands.

When asked to comment on the La Plata project, Rep. **Cliff Stearns** (R-Florida), vice chairman of the House Subcommittee on Telecommunications and the Internet, noted that after 9/11, he held a hearing on the closure of securities markets due to security concerns and power outages at the New York Stock Exchange. At the hearing—which Stearns chaired in his capacity as chairman of the commerce, trade, and consumer protection subcommittee—the use of telenetworks to reduce risk was reviewed. “I strongly believe that similar consideration should go into developing the headquarters for DHS,” Stearns declared. “A dispersed, Internet-driven scheme would provide added security for the operations of DHS, which would offer added economic, environmental, and transportation benefits.”

Tom Davis (R-Virginia), chairman of the government reform committee, has said in the House’s oversight hearing on federal telework: “**The war on terror makes the ability to work at off-site locations more than an attractive option for employees and employers; it’s now an imperative.**” He adds that it is now known that government is disruptable by things ranging from “snowstorms and hurricanes to anthrax mailings and ‘tractor man.’” A distributed network of federal workers can prevent disruptions.

William M. Mularie, CEO of the **Telework Consortium**, a government, industry, and academic think tank in Herndon, Virginia, has held posts in defense intelligence. “There’ll be more terrorism,” he predicts. “We must plan for it. One way to do this is **not to ‘bunch up.’ Distributing people is a basic security principle.** The U.S. is presently a third-world telecommunications country, around 13th or lower globally in telework capability. This must change. The La Plata project is on the right track,” he comments.

Lockwood says he will coordinate with DHS leaders to ensure the project receives “appropriate consideration,” adding: “I am a proponent of the concept of distributed, collaborative work environments.”

But assuming an urban telecommunity is good for DHS, is it also good for small towns and neighborhoods?

Emphatically yes, says Feinberg. “It’s the beginning of the end for neighborhoods that empty by day. As they become communities of teleworkers with differing schedules, residential areas will take on a life unknown to the traditional ‘ghost suburb’ whose inhabitants leave at dawn and return by train or car in the evening,” he adds.

“These communities will need a new generation of village facilities. Gyms. More coffee shops, restaurants, and other places to meet and socialize,” continues Feinberg. Small

communities will come alive at last, as real, functioning neighborhoods.”

Feinberg’s advisers include experts such as **Garth Rockcastle**, dean of architecture and planning at the University of Maryland, and **Charles Lamb**, cofounder of RTKL, an architecture firm based in Baltimore. But his project is largely the work of one researcher: MIT-educated systems engineer **Jay Hellman**, a specialist in how technology affects real estate and urban planning. Hellman’s credits include a major recent change to Washington, D.C.’s skyline—500 New Jersey Avenue, located about two blocks from the grounds of the U.S. Capitol. For years, skeptics dismissed the small, narrow, unusually shaped site as undevelopable. Hellman’s technology studies convinced him otherwise. He assembled the site, formed a team to prove its viability, and won unprecedented zoning modifications for it. The National Association of Realtors opened its new, \$45 million D.C. offices there last year.



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Feinberg says he is confident that **Hellman’s research pinpoints La Plata’s potential with similar accuracy.** Hellman, he notes, has studied the town since 1986 and is one of America’s most active expounders of telecommunity principles. “His audiences range from [those at] Howard, Catholic, and George Mason universities to real estate professionals in Europe, where he’s lectured for the Belgian government.” In 1996, House Democratic Whip Rep. **Steny Hoyer** (Maryland) briefed then-Vice President Al Gore on Hellman’s telework research, recommending it as “very helpful as we look ahead to economically and environmentally efficient ways to reinvent government.” Lockwood confirms that even before he read Feinberg’s proposal he was “very familiar” with its rationale, having discussed Hellman’s research with him at length.

To systematize the socioeconomic and urban planning implications of telecommunity, Hellman coined the phrase “**virtual adjacency**,” registered with the U.S. Patent and Trademark Office. His telecommunity concept differs from others similarly named. While a telecommunity can mean a network of people in remote cities or even on distant

continents, connected occasionally by the Internet, Hellman's "urban telecommunity" is a cohesive group linked 24 hours a day by both in-person and on-screen access, with some members far apart but others physically near each other.

Also not to be confused with Hellman's doctrine is the notion of simple telecommuting. "Telecommuting is working at home periodically," he says. "A small scheduling change. **But the urban telecommunity about to emerge in America is a real, villagelike community whose life revolves around telework with desktop videoconferencing. It's like the difference between radio and television. It's a new structure in our society,**" adds Hellman.

This message fits well with the latest strategic management research. Lockwood sees conceptual links between Hellman and George Mason University scholar Richard Florida, whose books *The Rise of the Creative Class* and *Cities and the Creative Class* describe urban growth as fueled by the ability of towns to form organic, industry-specific communities of sophisticated, creative coworkers with many lifestyle choices.

And while many Internet-watchers assume it no longer matters where one is located, two researchers at the **University of Toronto's Rotman School of Management—Maryann Feldman and Roger Martin—**say geographical communities boost the prosperity of organizations, industries, and regions. They call this "jurisdictional advantage." With faster communication networks, they report, "paradoxically, geographically defined clusters of related firms have become fundamental cornerstones of regional economic growth and national competitiveness." Examples include New York's fashion industry and the film industry's continuing anchorage in Hollywood. Hellman says few urban centers have the bandwidth to support such jurisdictions. "La Plata's four existing fiber-optic networks give it an extraordinary competitive opportunity."



La Plata can demonstrate how planned development can constrain sprawl, argue Feinberg and Hellman. The human or "software" development elements are key, Feinberg stresses. "It's like a jigsaw puzzle. The fiber optics and the community college are critical. But these are only two pieces. Others are needed. The town must annex land for housing, retail, and office space. The town square must be developed properly. The challenge is that each element is controlled by parties who may not easily see the whole picture. Everyone benefits only when all the pieces fit together," he maintains. An urban planner for 30 years, Feinberg says it is the best example he has found of why towns need to conduct expert vision studies. "Developing within the framework of a vision plan is the only way to avoid hodgepodge sprawl and ensure rational, integrated provision for all the needs of a balanced, living community."

Several stakeholders seem ready to cooperate. For example, a warehouse of the Mid-Atlantic Coca-Cola Bottling Company stands where the heart of a new village square is envisaged. It will have to relocate if the area is to be used as residential, retail, and professional space. **Curtis L. Etherly, Jr., Coca-Cola's** vice president for public affairs, says Coke is ready to discuss "all that it can do to support and facilitate La Plata's continuing growth into the 21st century." He recalls, however, that explorations four years ago showed the town first had to address issues such as a new industrial park to which businesses could relocate, road improvements, and utility upgrades. These needs, Feinberg suggests, can be met with help from Maryland's Priority Place program, which supports regionally beneficial projects.

Accountant **Roy G. Hale**, La Plata mayoral candidate and town councilor for ten years, says growth will also mean finding money for new school, water, and sewage systems, "but these obstacles can and must be overcome," he adds. "We need responsible development. The telecommunity plan has much potential. As mayor, I'll reconvene the vision team immediately to examine our options." Planner **David Jenkins**, executive director of the region's **Tri-County Council**, and **Gary Echols**, La Plata's planning commission chairman, agree. "This is a realistic initiative," Echols says.

Hellman co-owns land abutting La Plata. Feinberg says neither he nor his company has invested anything yet except research and management time. "If this does not proceed, we will be busy enough elsewhere. Our 2005 portfolio so far totals about \$40 million." But he admits that Central Maryland Development Inc. "wants this to happen, as it's a chance for all concerned to make history."

What seems clear is that regardless of where the first telecommunity is established, communications technology is now central to thinking about federal workplaces—and the kind of neighborhoods America will have in the future.

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FEATURE BOX

Technological Vision

Can the federal workforce help shape American communities? The La Plata project leaders believe it can — in part, by sheer weight of numbers. In 2004, the U.S. Office of Personnel Management put Uncle Sam's civilian staff at more than 2.7 million, with 336,200 employees in the Washington, D.C., metropolitan area, and 13 percent of the national total—354,367—in the U.S. Department of Homeland Security (DHS). "If the telework potential of this population is properly tapped, it's got to affect our broader society," maintains urban technologies expert Jay Hellman.

Support for Hellman's assertion comes from Oxford-educated **William A. Owens**, CEO of the global telecommunications giant Nortel, based in Canada. In a series of scholarly publications, Owens has argued that the United States's economy, quality of life, and security can progress optimally into the 21st century only through a concerted, government-led effort to move all facets of society toward a substantively more sophisticated level of telecommunications technology. Owens points to South Korea as an example of a nation whose economic competitiveness promises to outstrip America's significantly because Korea's government has shown more technological vision.

While Owens has nothing to do with the La Plata DHS project, his assessment is directly relevant to it, not only because of his emphasis on the socioeconomic implications of teletechnology, but also because he sees a vastly expanded adoption of telework by the federal

government as essential to post-9/11 national security. "In intelligence management, national defense, and the effectiveness of day-to-day communication and administration, the U.S. government is today a technological underperformer by a significant margin," Owens says. He is in a better position than most to judge: **a retired admiral, he was formerly vice chairman of the Joint Chiefs of Staff and the second-ranking military officer in the United States.** He held responsibility for reorganizing the armed forces in the post-Cold War era and commanded the Sixth Fleet in 1990 and 1991. "The initiative that has been proposed for La Plata, with a distributed workforce for [the Department of] Homeland Security, is a good idea, and a fine example of the direction in which we should be heading," he comments. "Government has to work with the private sector imaginatively on pioneering projects of this kind if we are to maintain our world leadership in terms of prosperity and security."

According to a survey published this past February, almost two-thirds of U.S. government employees have not been allowed to telecommute, even though Congress has established penalties for agencies that do not allow telework options. The survey, conducted by IT vendor CDW Government Inc., based in Vernon Hills, Illinois, found that 87 percent of employees surveyed would telecommute if given the option.—**N.S.**

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