

# Public Works DIGEST

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Fort Hunter Liggett, Calif., plans to build three-level townhouse barracks along a new transit corridor, a plan that will support walkability and infill development. Image courtesy of The Urban Collaborative LLC. Page 14



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U.S. Army Installation  
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# Capacity planning: Preparing for an unknown future

by Jill A. Schreiber

The beginning of a new year often brings thoughts about the possibilities of the year ahead, and 2012 will certainly be an interesting year for planning. The impact of current fiscal policy on Military Construction provides an opportunity to truly focus on establishing goals for growth and development within installation boundaries, determining the carrying capacity of Army land holdings and preparing plans that can flexibly accommodate an unknown future.

Capacity planning allows planners to determine an installation's maximum development capacity based on conformance to the installation's planning vision, goals and objectives. While known requirements need to be sited in the master plan, room needs to be reserved for unknown future requirements.

The difference between the existing condition and the future build-out is the capacity. In this way, planning precedes programming, is proactive and does not account only for current known requirements. Notional facilities are sited on the illustrative plan to show the potential for future growth and development of the area.

Planning based on an area's development capacity, not just current known mission requirements, demonstrates a commitment to the value of land and enables installations to show how they can flexibly accommodate future missions. This perspective on the room for growth within cantonment boundaries allows planners to actually implement a plan in alignment with an installation's vision — executing construction as mission needs drive and funding becomes available.

Capacity planning also provides a line of defense against Base Realignment and Closure actions, as leadership is able to immediately interpret the carrying capacity of the land holding and determine the strategic value of the installation as a defense asset.

Installations throughout the Army



Jill A. Schreiber  
Courtesy photo

have started thinking about capacity planning as a crucial component of their master planning efforts. At Fort Sill in Lawton, Okla., the West Campus Area Development Plan demonstrates the feasibility for construction of 85,000 to 1,505,000 square feet of mission support space and 259,000 to 546,772 square feet of community support space, depending on building height. Fort Sill has just undergone a transformative BRAC process — \$432 million for construction of 27 new facilities, but it continues to look ahead and validate its ability to accommodate new missions and facilities and adapt to changing Army needs.

Fort Hunter Liggett, headquarters for the U.S. Army Combat Support Training Center, in California's Salinas Valley, has used capacity planning to justify the expansion of its training campus while guarding against encroachment on training land. Operational readiness training complexes, barracks and mission support facilities are sited in areas



The Fort Sill West Campus ADP demonstrates the areas capacity for current and future development.  
Graphic by The Urban Collaborative LLC

Acronyms and Abbreviations	
ADP	area development plan
BRAC	Base Realignment and Closure
UFC	Unified Facilities Criteria

within the cantonment once thought of as built to capacity. Construction has already commenced on support facilities established in fiscal 2011's area development planning process. Fort Hunter Liggett's plan maximizes the capacity of the cantonment area while preserving valuable range and training land, ensuring their continuing viability as a premier training location for the Army.

Fort Hood in Killeen, Texas, has also started a capacity planning effort as part of a comprehensive plan to update ADPs throughout the installation. As one of the largest land holders in the Army, Fort Hood has a tremendous potential for mission impact. Numbers from the initial planning effort demonstrate Hood still has room to accommodate even more facilities in support of future missions. The ADP for the 1,406-acre Clear Creek-Darnall district indicates space for 3.3 million to 6.1 million square feet of buildings, again depending on building height, and more than 9,000 additional parking spaces.

Any strong master plan is a living document. Simply documenting and siting current known requirements is short sighted.

Master plans need to be adaptable, created to seize opportunities that arise with an unknown future. Capacity planning provides a way for planners to identify the potential of their installation and to be prepared to execute proactively as opposed to reactively.

An update to the Unified Facilities Criteria for installation master planning, currently UFC 2-000-02, has been submitted by a multi-service comprehensive working group and is currently under review. Capacity planning will be included as one of the 10



# Bulletin presents smart-growth strategies

by Natalie Myers

**A** Public Works Technical Bulletin will help master planners achieve the smart-growth principles embedded in Army Regulation 210-20, *Real Property Master Planning for Army Installations*. The Corps of Engineers' PWTB 200-1-96, *Initiating Regional Smart-Growth Strategies*, is available for download at [http://www.wbdg.org/ccb/ARMYCOE/PWTB/pwtb\\_200\\_1\\_96.pdf](http://www.wbdg.org/ccb/ARMYCOE/PWTB/pwtb_200_1_96.pdf).

AR 210-20 states that all planning and development for installations must consider regional planning factors. This provision can help installations achieve the smart-growth ideals, which value long-range, regional considerations of sustainability.

The regulation's goals include:

- achieving land-use patterns that eliminate noise, dust, radio and frequency interference;
- protecting a continuous system of natural corridors that decrease training and testing pressures; and



*Communication on a regional level brings regional considerations to installation master plans. Photo courtesy of Engineer Research and Development Center*

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sustainable planning strategies within the UFC.

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- expanding mobility options to minimize transportation costs.

Although AR 210-20 is now being updated, the update will also incorporate the tenet of smart growth.

There has been little discussion about these regionally smart outcomes, and as a result, many neighboring communities are still making counterproductive development decisions. Smart growth means that natural systems must be understood at a regional scale, and regional transportation systems such as highways, trains and mass transit must create a framework for compact development. This extension requires an understanding of interrelated systems and having strong, regional engagement and cooperation.

Understanding those interrelated systems is no easy task. An overwhelming number of issues are involved, and the potential exists for regional initiatives to fall apart because of their sheer size and complexity. Yet, many aspects of smart growth — integrated transportation and land-use planning, conservation of sustainable open space and attainment of a jobs and housing balance — are most logically approached from a regional perspective.

For installations looking for a next step or a starting point, the PWTB offers practical explanations for how to proceed. It is important to keep in mind that smart growth is a process, not an end state. Smart growth involves continuous, ongoing improvement and a realignment of community goals and practices to grow in a more responsible and resilient manner. The bulletin focuses on a framework to guide regional organization, which includes information gathering, communication and action.

**Information gathering** means knowing the fundamentals of the planning process, integrating environmental, economic and social factors in measurements and assessments, and analyzing changes in attitudes, values and behavior. Provided within the PWTB is an overview of

Acronyms and Abbreviations	
AR	Army Regulation
PWTB	Public Works Technical Bulletin

master planning at Army installations. The bulletin identifies the documents and processes critical to implementing smart-growth policy.

**Communication** builds awareness, informs to promote understanding and engages planners in achieving sustainability. Available to Army and other federal planners are resources and training that can help them address smart-growth issues and find the necessary tools. More than a dozen courses, websites, forums and organizations are cataloged.

**Action** encompasses measuring efforts in moving toward sustainability and showing results. To this end, the bulletin presents an eight-step process to engage regional stakeholders in moving forward toward incorporating regional considerations within their master plans. The steps are an accumulation of literature, expert review and case study experiences.

Few geographic regions have been very successful in guiding overall development in ways that achieve smart-growth objectives. The reason: few are looking at the sum of the parts. Regions must knit together the picture that says, "This is how we are growing, and these are the implications."

The PWTB builds on the common understanding that installation master plans need to include regional growth strategies. A forward-moving agenda can then be initiated in a way consistent with these aspirations.

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