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Master Planning,
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The top two images show the proposed mixed-use mission support facility at U.S. Army Garrison Miami, Florida, that combines logistics and administrative uses into one connected building supporting footprint reduction, resiliency, energy efficiency, low impact development, and mission effectiveness goals. The proposed barracks (bottom image) follow the apartment model first developed at Fort Leonard Wood with one building sized for no more than 10 residents. This makes the building exempt from anti-terrorism/force protection requirements and much more efficient in terms of total cost and area required. See article on [Page 15](#) (Images courtesy of The Urban Collaborative, LLC).





Avoiding long-term costs through effective master planning

by Lt. Col. Bill Smith, Janie Brady and Mark Gillem

Some people consider planning efforts an expense – just another report to fill the shelves. If that is in fact the case, then the planning process and the plan itself are deeply flawed. Good planning should pay for itself in long-term cost avoidances, enhanced productivity, and mission sustainability. This has been the case at Buckley Air Force Base outside Denver. In a planning effort led by the U.S. Army Corps of Engineers using the planning process outlined in Unified Facilities Criteria (UFC) 2-100-01 (Installation Master Planning), Buckley's planning team uncovered opportunities to avoid unnecessary costs, such as:

Relocated Future Taxiway

The stakeholder-driven plan led to a relocation of a programmed new parallel taxiway that will avoid roughly \$1 million in an Environmental Impact Statement and several years. The project also resulted in an additional cost avoidance of up to \$30 million due to simplified construction procedures based on the new taxiway location and opens up to 185 acres for new development.

Combat Arms Training Facility

Resiting a programmed Combat Arms Training facility resulted in a cost avoidance of \$3 million due to unneeded utility extensions. It also will save personnel significant time in driving to the facility. The project also was moved up on the command priority list due to this new, more affordable siting.

Telluride Gate

Through the planning process, stakeholders determined that a programmed new gate was not required, resulting in a \$600,000 cost avoidance.

Medical Parking Lot

Based on the planning effort, stakeholders withdrew a \$300,000 parking lot project. They decided they could share parking with existing users and walk a bit more based on what they learned in the planning process.

Environmental Assessment

The process resulted in the documentation necessary to do an installation-wide Programmatic Environmental Assessment at one

time versus doing this on a project-by-project basis, which has been the approach in the past. This will result in a cost avoidance of at least \$500,000 for seven programmed buildings that will now not need individual Environmental Assessments. As time passes, the cost avoidance will grow substantially.

Regional Synergies

While not quantitative in nature, the inclusion of stakeholders from regional transportation and planning agencies, like the Colorado Department of Transportation, the Regional Transportation District, and the City of Aurora, resulted in operational synergies now being used to synchronize region-wide efforts with the installation's needs. There is now an established trusting and cooperative atmosphere between the military and these agencies, which may save time and money later.

Readiness and Environmental Protection Initiative (REPI)

The installation is currently pursuing a 1,000 plus acre buffering project to protect multiple mission sets. Prior to developing the UFC 2-100-1 compliant Master Plan, Buckley had a \$27 million land acquisition Military Construction project in its sights. The fidelity of the installation's Master Plan data assured the commander that endorsing the REPI project was in the best interest of mission sustainment at Buckley, even though the installation footprint end state will be reduced by about 100 acres. Instead of a \$27 million cost, nine community partners have contributed more than half of the REPI project dollars, avoiding at least \$13 million in initial costs while creating open space and trail connectivity throughout the community. The long-term maintenance costs of fencing, as well as developing and maintaining roads reaches far beyond the initial \$13 million in cost avoidance. The property can now be better used for recreation and multi-modal connectivity for the community, while sustaining and enhancing mission readiness. The installation could not have pursued the REPI project without the stakeholder development and data fidelity created through the master planning process and products.



Stakeholders from across the Denver metropolitan region participated in Buckley Air Force Base's planning process and took ownership over the final plan. (Image courtesy The Urban Collaborative, LLC.)

Building In-House Capacity

By engaging stakeholders in the planning process, they could participate in planning efficient solutions. The process used at Buckley included actual planning and training in the UFC planning process and is transferable to other installations. The training itself creates a momentum for better planning. In one example, the process used at Buckley empowered in-house, government planners from the region to create their own plans at Cheyenne Mountain, Colorado. A government-run, in-house planning effort at Cheyenne Mountain produced a new UFC-compliant Vision Plan and two Area Development Plans, which avoided up to \$300,000 in contracted costs.

In the end, good planning pays dividends in the short and long term. But plans cannot be mere lists of known projects. They need to think beyond today toward what could be and then make a business case for more effective solutions.

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