These are exciting times for us in southern Arizona! Among other things, the real estate market is making strong and steady advances, we are on the radar of corporations and significant employers, we have a vibrant and still improving downtown in Tucson, and we are seeing real economic growth.

The University of Arizona is committed to serving the community and improving lives in our great state and beyond. The campus continues to grow to meet an increasing enrollment, a growing program of research and development, and a rising need for proactive community service. This growth in these vibrant times comes with both opportunity and challenge.

In the coming paragraphs, I will share some about these opportunities and challenges from our Planning, Design & Construction perspective. I will first mention a few recent accomplishments to our built environment, and what we think is up next. Finally, I will highlight a few of the trends we are experiencing especially in the office environment.

Recent Accomplishments

A great many improvements have been made to the Tucson and Phoenix campuses in the last few years. The Lowell-Stevens North End Zone Football facility and the Ginny Clements Wildcat Academic Center have been proud additions to the campus for Intercollegiate Athletics. The Biomedical Sciences Partnership Building was completed earlier this year in our downtown Phoenix campus and the South Stadium Parking Structure here south of Arizona Stadium was just completed for our fall semester together with an adjacent new intersection and traffic signal. There have been important renovations and additions as well including work at McClelland Hall, the S.A.L.T. Center, the Administration building and others. Visit campus and you will see our growth, renewal and commitment.
Opportunities And Challenges

The University can absolutely not afford to build extravagantly, but we can also absolutely not afford to create buildings that just facilitate. That would be short sighted and a poor investment. We will pay utilities for our buildings, maintain them and use them for a very long time. Fifty to one hundred years of service is not unusual. These facilities will shape behavior for years to come. They must be efficient spaces that help people be more productive, healthy and inspired. We are fortunate to have very talented and experienced people on our team and they constantly ensure we are getting best value. This will pay us back many fold but first we must find the funding to get it built and then we need to keep that building project within its established budget. This is becoming increasing complex but knowledge is power and sharing that knowledge is essential.

In the design and construction industry today we are acutely aware of the rising labor and skilled-labor shortages (here and nationwide). This affects the housing industry as well as all of the construction markets. As we know, many construction workers in all the related fields left the industry when the economic bubble burst and they couldn’t make a living. Meanwhile our educational system has reduced the amount of construction-focused career and technical education opportunities. This is coupled with skilled baby boomers retiring at a markedly increased rate. This is developing into a ‘perfect storm’ for our industry.

As the primary and secondary markets see significantly pent up demand for construction, tertiary markets like Tucson are affected even more deeply. Like most of us, trades people go where the money and stability are and contractors are forced to hiring workers from rivals in a reduced workforce scenario at increasing pay scales. This of course affects construction pricing and quality. The increased demand for construction also affects material pricing and availability. The hurricanes and huge need to rebuild in the gulf, in Florida and the Caribbean will only add pressure to construction worker and material availability and construction costs.

It is not completely unusual for there to be a pendulum swing of change in construction effects and pricing and no one is yet predicting the double-digit escalation we saw in the mid 2000’s any time soon, however understanding the market and influences can help us significantly and allow us to stay ahead of the associated challenges as we also seek solutions. Some of what we are doing and ask others to also support is:

- Stay connected to industry experts and organizations relative to market changes so that budgets, methods and materials remain efficient and competitive.
- Support construction trade and technical education/training both through our member organizations and in the education systems.
- Support construction automation and factory fabricated assembly techniques.

Health Sciences Innovation Building. Project is currently under construction with scheduled completion being May 2018
• More so than usual, anticipate that building sooner may avoid costly escalation later
• Consider early ordering of project materials if warranted
• Include comprehensive preconstruction services in the project—comprehensive estimating, value engineering, constructability reviews and options to ensure budget adherence all the way through a project.

What’s Up Next?
Our Capital Improvement Plan is a direct reflection of our investment toward our strategic goals. Strategic investment by the State and the recently approved Athletics, Health & Recreation, and Student Services fees are facilitating much needed improvement and growth for the campus.

The State’s appropriations will allow us to begin addressing some of the most critical deferred maintenance across campus as well as provide a much needed investment in growth of our research infrastructure/buildings.

The Athletics fee together with generous donations will allow us to focus on additional student benefits at multiple athletics venues and facilities including a potential indoor sports center, and improvements at Arizona Stadium, our Baseball facilities, Softball, Aquatics and new locker facilities for multiple sports.

The Health and Recreation fee will support a potential satellite facility to better serve the north campus area while the Student Services Fee will help fund development of our exciting Student Success District concept that will be anchored by our historic Bear Down Gym and the adjacent Libraries.

Office Trends
Here are a few quick observations about trends we are seeing in office desires and designs at the University.

Like elsewhere, we see more and more Millennials among our staff populations in addition to the Generation Xers and Baby Boomers. What we have found is that it is a mistake to try to create productive spaces based upon perceived defining characteristics. Instead flexibility in the offerings and function is key and has become more important than ever. We do note that many are increasingly finding smaller offices and even open office environments to be acceptable however not everyone is as productive in open environments and there remains some stigma/status relative to enclosed vs open offices.

When using open office environments, we have found that white or pink noise is beneficial as are some small and semi-private ‘huddle rooms’ which serve as a quite conference space for 2-3 people or a private phone call room for an individual.

A few of the other trending office space needs we’ve observed:

• Comfortable and convenient collaboration and break out spaces with technology and some acoustic separation help to foster small work groups.
• Comfortable and varied social spaces such as lobbies and break areas (with food and kitchens close by) often facilitate impromptu collaborations and provide relief to both enclosed and open office environments. Having soft seating and flexible furniture help the usability.
• Unassigned ‘office hoteling spaces’ provide a resource for visiting faculty, residents and others who can be productive even in a temporary situation
• Access to views and natural light are increasing productivity. Keeping enclosed offices closer to the core of a building with perimeter windows allows more people access to the views and light.
• Having a variety of conference room sizes each with technology/AV facilitates multiple size groups and functions however also adds cost
• Building in flexibility both in the furniture systems and in the space allocations will be beneficial in the long run.

We are proud of our University and our community—these are challenging and exciting times ripe with opportunity and together we make are making a difference.

Peter Dourlein, AIA, LEED AP is Campus Architect and Assistant Vice President for Planning, Design & Construction. Over the last 26 years he has been a part of the largest capital construction programs in the University’s history. He is a registered architect and LEED Accredited Professional. He can be reached at dourlein@email.arizona.edu.