

Solving the Housing Crisis

A Cannon Air Force Base Approach by Lieutenant Colonel Michael Kittrell

INSIDE

Define your challenge and establish a path for success built on Design Thinking to find unique housing solutions

Build a shared understanding and appreciation of the housing challenges your installation faces. Focus, determination, data, thorough analysis, creative thinking, innovative ideas, opportunity hunting, effective communication, empathy, and new perspectives go a long way in achieving success.

Accelerate change to win; solve the housing crisis using a framework for the future and Diffusion of Innovations Theory

Lead change through culture, innovation, teamwork, enduring relationships, strengthened partnerships, and effective communication.

Enterprise-wide solutions to common challenges; a call for change and new concepts

Create a housing environment our Service Members deserve with bold changes to law, policy, resourcing strategy, and budgetary processes that creates more housing opportunities and enables decisions to be made at the speed of relevancy.



Executive Summary: This paper, written for a DoD-wide and community audience, informs discussions at the 2023 Installation Innovation Forum session on Solving the Housing Crunch. For decades, many military installations have struggled to provide safe and affordable housing, leaving most installations lacking solutions. Traditional solutions like Military Construction (MILCON) are late to meet requirements and are proving more difficult to fund and maintain in a resource constrained environment. Why do housing problems persist when there is no shortage of innovative ideas proposed? Where is the spark for change? This paper shares Cannon's approach and the belief of how little things can make a big difference. Achieving meaningful and effective change in the Department of Defense (DoD) is hard, especially when we are not at war. Do we face a housing crunch or a crisis? Solutions begin with Design Thinking, a humanistic approach to innovation that uses empathy and creativity to solve problems. In the middle of difficulty lies opportunities, but do we have the right culture and views of innovation in place to see them through the chaos? Our ability to change is the key to solve the housing crisis and it starts with how we view the situation. The paper discusses innovation frameworks and Diffusion of Innovations Theory to offer views on why change matters and how to lead a cultural transformation. There is no viable path to solve housing shortages in a timely and effective manner within the traditional constructs and concepts that exist within the DoD. This is failure by concept and must be the DoD's call for change. A whole-of-government approach is needed to incentivize private market investment and enable the DoD to employ enterprise-wide solutions. Installations will need community partners and access to private capital to incentivize and grow their housing supply. A "build to lease" strategy through partnerships must be employed and favored over MILCON housing projects. Bold changes to law, policy, bureaucratic and budgetary processes, funding strategies, and decision-making are required. The paper concludes on why solving the housing crisis matters to an installation in terms of improving quality of life and quality of mission.

Design Thinking

Define your challenge and establish a path for success built on Design Thinking to find unique housing solutions.

What is Design Thinking? Design Thinking is a problem-solving process that involves six steps: empathize, define, ideate, prototype, test, and implement. Design Thinking is a methodology for innovation that focuses on human-centered design. It is a humanistic approach to innovation that uses empathy and creativity to solve problems. The process can be applied to solve a wide range of problems – even ones related to housing. The first step is to understand how people think and feel about their problems.

Design Thinking: Process and Principles



I have had the pleasure to meet Airmen and their families at townhalls to discuss their housing concerns, and meet Airmen who resided in dormitories, to include some who were double-occupied and now live in new apartments. Afterwards, I had a new understanding and appreciation on not only how housing challenges can impact quality of life, but also how they impact quality of mission. My newfound empathy and fresh perspective have driven me in the relentless pursuit to provide safe, affordable, and suitable housing for our Airmen and their families. As Deputy Commander of a Special Operations Mission Support Group (SOMSG) that supports an installation of approximately five thousand Airmen, I am not the first commander working to solve these challenges, and I am certainly not alone. I believe I will not be the last unless the buck stops here.

Cannon Air Base (CAFB) was realigned as an Air Force Special Operations Command (AFSOC) base in 2007 and it brought consistent change to mission sets and people. Ever since, it is safe to say that finding safe and affordable housing has been a steady concern for our Airmen and their families. Our installation benefits from a Military Housing Privatization Initiative (MHPI) and its fair share of Military Construction (MILCON) projects for dorms. However, despite all the installation's advancement on the housing front, the installation still finds itself facing significant challenges. I believe our housing situation is a crisis, not a crunch. The larger macroeconomic housing market headwinds, interest rate environment, cost of inflation, thorough analysis of historical manning and retention rates, Airmen retainability, Air Force changes to force structure, and other reports like the Dorm

Disclaimer: This paper is solely the views of Lieutenant Colonel Michael Kittrell and does not represent the views or official positions of the U.S. Government, Department of Defense, or United States Air Force.

Five Principles of Design Thinking:

1. Empathize with your users
2. Define a meaningful and actionable problem statement.
3. Ideate by challenging assumptions and creating ideas for innovative solutions.
4. Prototype to start creating solutions.
5. Test those solutions in the real world.

Master Plan (DMP) or our recent Housing Requirements and Market Analysis (HRMA) report formulate my characterization of the situation as a crisis versus a crunch.

On the dormitory front, CAFB is projected to have an estimated shortage of 400-500 dorm rooms that should persist through 2030. This is due to historically 23% more junior Airmen assigned to CAFB than authorized and the Air Force's Enlisted Grade Restructure (EGR) that grew authorized junior Airmen from 1,862 personnel to 2,332 personnel that started in FY23.

Why is CAFB overmanned in these ranks? I believe it is due to a retention rate of 7 – 10% below the Air Force average for first assignment Airmen, and the lack of service retainability of Airmen scheduled to come to CAFB on their second assignment. If we are not careful, retention problems of today will be recruiting problems of tomorrow. Airmen are voting with their feet about rather or not they want to continue their Air Force service at CAFB. This is even more evident by analyzing the rank and skill-levels of the Airmen assigned within our 1,300-person group. All our units are overmanned by at least twice their authorized levels with junior Airmen (E1 - E4) but are undermanned in higher to mid-grade ranks resulting in a lack of experienced Airmen. Unit manning is sustained by Airmen fresh out of basic and technical training. An installation's dormitory capacity will continue to be strained when requirements are based on total authorized personnel instead of total assigned. This analysis helps an installation understand why a dorm shortage exists, but it does not alleviate the problem. However, there is value in understanding the why.

In February 2023, CAFB dorms were 104 percent occupied and 292 dorm eligible Airmen were incentivized to move out before the installation met the Air Force requirement to accommodate first-term Airmen for three years. This has been common practice for years due to capacity constraints. These Airmen now live on the local economy with 75% of them in single-family rentals (SFR) of at least three bedrooms and living with military roommates. Living in large SFRs may be the only affordable housing option for now. However, since they are on different assignment cycles this presents financial risks for these Airmen down the road.

In March 2023, CAFB established a cross-functional team called House Hunters comprised of representatives across the installation, Air Force Community Partnerships (AFCP), Air Force Civil Engineering Center (AFCEC), and Installation Mission Support Center (IMSC). This team met weekly to pursue a multi-prong approach to find a dormitory bridging solution until new dorms could be built in FY28. It was a Team of Teams that developed talent along the way, both on and off our installation. The team moved at an impressive pace, never seen throughout the Air Force organizations dealing with dorm issues. The team focused on two lines of efforts consisting of an off-base apartment lease and an Inter-Governmental Support Agreement (IGSA) with Eastern New Mexico University (ENMU).

In late July, CAFB hosted a three-day event attended by the AFCP team to meet with community leaders and stakeholders to explore where enhanced partnerships could advance quality of life and quality of mission initiatives. Topics discussed include: IGSA's, Defense Community Infrastructure Program, housing, real property, shared service contracts, joint training, grant programs, shared law



New Apartments Used as Dorms



ENMU Dormitory Rooms

enforcement duties and training, joint medical training, and included a tour of the ENMU campus and dorms. The event forged new relationships and strengthened existing ones. Further, the visit increased awareness of challenges throughout the community and explored possible solutions. Most solutions will take time, but others were shortly realized. We have our community partners to thank for helping us fix our traffic signals that were broken for over a year. A problem we could not solve on our own due to aged equipment, lack of parts, limited know-how, and simply not asking for help. Regarding family housing and unaccompanied housing, we held discussions in October on a possible IGSA with the City of Clovis, NM to meet a private market shortfall identified in our HRMA report.

Any one of these initiatives individually pursued by an installation could feel like an impossible task. Exploring multiple partnership initiatives at once is not the status quo. But it is at CAFB. We secured an off-base apartment lease for 120 Airmen with options up to 200 rooms, hosted an AFCP site visit attended by 32 community leaders, and was granted authority to enter in to an IGSA with ENMU all within seven months. Our success was not ours alone. It must be shared by everyone involved, especially teammates throughout our higher headquarters and community stakeholders.

Today, House Hunters continues to work on the same mission but with an expanded mandate to alleviate a private market housing shortfall of 1,843 that was identified in our installation's HRMA. Although the HRMA process is not perfect and our report is in draft form, it still provides valuable insights on the state of the housing market surrounding our installation. It offers a unique view on a housing market through the lens of military affordability and housing suitability.

What does the number 1,843 represent? Simply put, 1,843 represents the number of Airmen and their families who would not be successful in finding suitable quality and affordable housing in the private market. There is plenty to understand and analyze in a HRMA, but here are some key points that warrant mention here.

The housing areas surrounding CAFB are comprised of Curry County, NM; Roosevelt County, NM; and Palmer County, TX. Our two main municipalities are Clovis, NM and Portales, NM. The rental supply is projected to grow at 0.2 percent annually over the FY23 – FY28 period. Military family homeowners have declined from 717 to 590, representing a 29 percent decline over the 2010 – 2023 period. A 1,046 private market shortfall exists across all family housing profiles, and all fall below an \$1,800 cost threshold. A 797 private market shortfall exists across all unaccompanied housing profiles. Of note, 666 of the 797 are one-bedroom units all fall below an \$1,100 rental cost threshold.

These shortfalls are a cause for concern when our installation has a 400-500 dorm shortage and on-base housing is at 100 percent capacity. CAFB has an on-base housing wait list that averages nearly 300 families, mostly comprised of junior Non-Commissioned Officers who can wait up to eight months to live in base housing. Leaders at all levels must take a holistic view of the installation housing issues since housing issues are related to one another. When viewed holistically, it provides new insights to the entire housing situation. For example, the on-base housing shortfalls add to the rental supply strain we see in our private market and makes finding safe and affordable housing an even bigger challenge for many of

House Hunter Mission: provide safe, affordable, and suitable housing for CAFB Airmen.

our Airmen and their families. Their concerns are evident in data we received from a base-wide survey conducted to better inform the DoD's Basic Allowance for Housing (BAH) determination process. The survey collected quantitative data (median rent, average utility cost) and qualitative data that asked how easy it was to find safe and affordable housing within 95 percent of their BAH. Utilizing a five-point Likert scale ranging from "very easy" to "very difficult." A total of 2,022 Airmen (67 percent sample rate of off-base residents) responded with 1,600 of the 2,022 stating it was either "difficult" or "very difficult."

Examining macroeconomic data and the housing market nationwide adds even more concerns. Nationwide, demand for single-family rentals (SFR) exceed supply due to:

- Structural undersupply of single-family homes that stems from the 2008 Financial Crisis.
- An aging millennial cohort seeking a single-family lifestyle.
- Eroding affordability of homeownership due to surging prices and higher mortgage rates.
- Relative affordability of SFRs compared to ownership.

We are becoming a Nation of Renters. The spread between homeownership costs and rents for single-family homes is the widest it has been in over 50 years. The increased cost of homeownership will continue to drive potential homebuyers into renting, and push SFR demand beyond supply even further. The Nation's structural shortage of homes, sitting under half the four-decade average, should continue to support high SFR occupancy rates and rent growth. Harvard's *The State of the Nation's Housing 2023* report states "home prices and rents remain elevated from pre-pandemic levels. Millions of households are now priced out of homeownership, grappling with housing cost burdens...increasing the need for policies to address the national housing shortfall at the root of the affordability crisis." Many CAFB Airmen feel that BAH is not commensurate with their true cost of living, and I suspect many Service Members feel the same across the Nation.

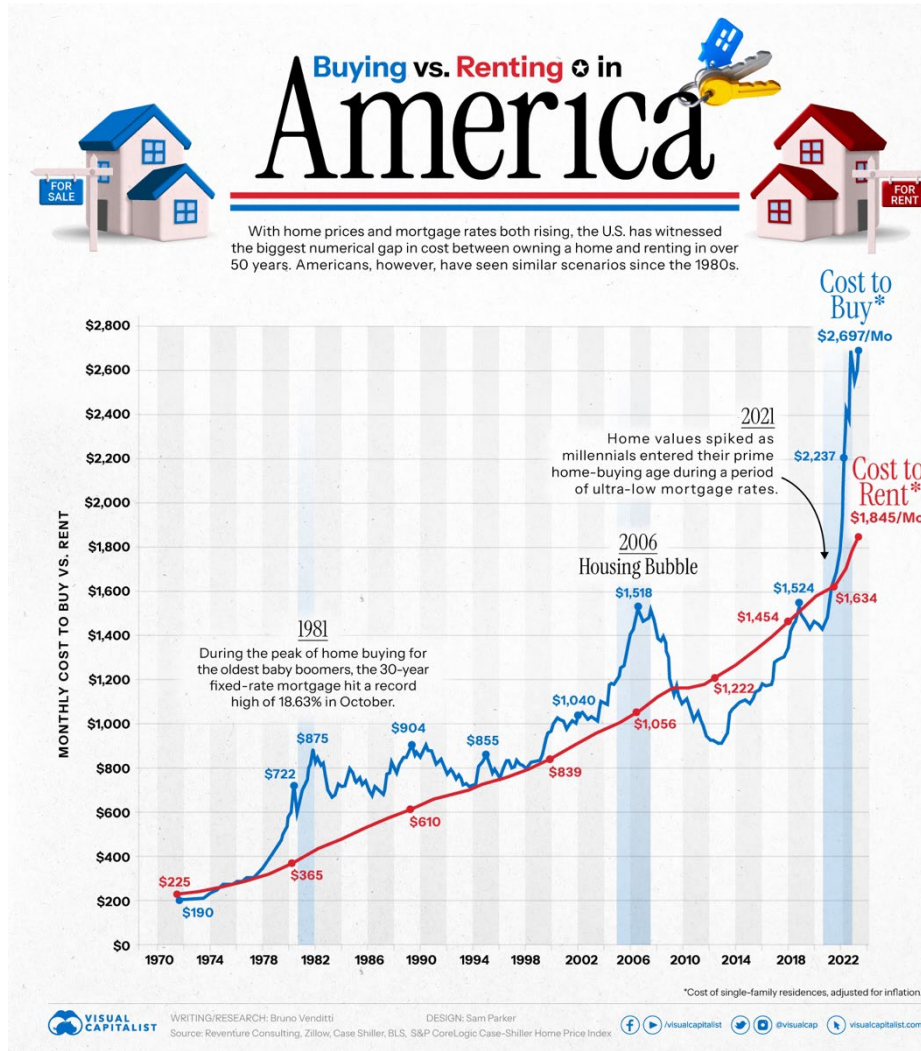
The Federal Reserve's efforts to curb inflation by rising interest rates may address the demand side of the equation (The Law of Supply and Demand), but their decisions adversely impact the supply side of it. Growing the Nation's housing supply is proving difficult. Freddie Mac's October 2023 report titled *U.S. Economic, Housing, and Mortgage Market Outlook* states "home builders are becoming less confident...higher interest rates and supply side constraints are putting pressure on suppliers' ability to build new homes."

Given all this data and analysis, what does it mean for installations and communities? First and foremost, it enables us to better define our challenges and set forth a path to success. Using Design Thinking, we understand, explore, and materialize solutions. By understanding your installation requirements and private housing market dynamics, both locally and nationally, you gain a better appreciation of the "crunch", or in my view, the "crisis." When I meet Airmen and their families who share their personal housing and financial stresses, I listen and empathize. When we marginalize their housing concerns, educate them on how BAH is determined, remind them BAH is intended to cover 95% of living expenses, or opine that BAH earns everyone safe and affordable housing; our efforts may be



construed as unempathetic. Service Members want answers to their growing housing costs and shrinking overall military compensation. Let us give them some!

The series of charts depict macroeconomic housing data courtesy of the Visual Capitalist and Freddie Mac.



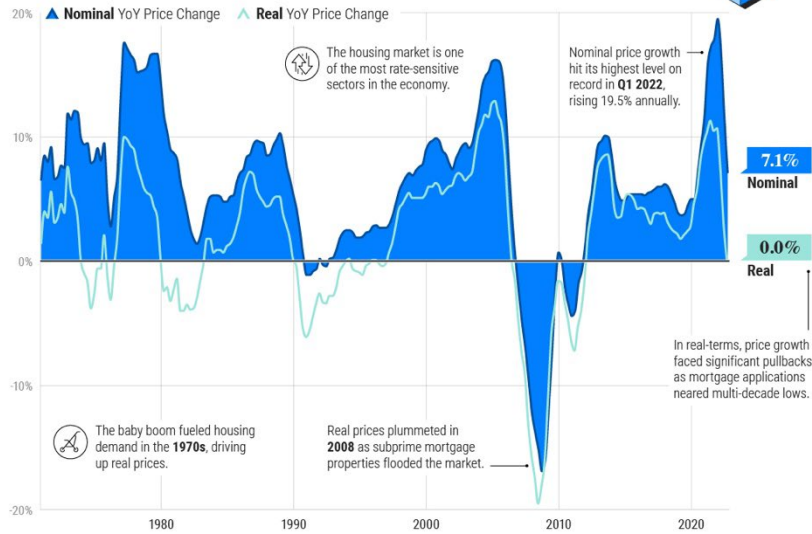
U.S. Home Price Growth

OVER 50 YEARS

In Q4 2022, real home prices saw their slowest annual growth in a decade. High inflation and rising mortgage rates cooled prices, despite record-low inventory.



Nominal vs. Real Home Prices 1971-2022



Total Housing Inventory

The total housing supply is under half the four-decade average.



Median Home Prices Nominal

Although price growth has slowed, nominal prices are still 42% higher than pre-pandemic levels.



Sources: Bank for International Settlements, Wall Street Journal, JP Morgan, Harvard University, CNN, U.S. Census Bureau, National Association of Realtors, Mortgage Bankers Association



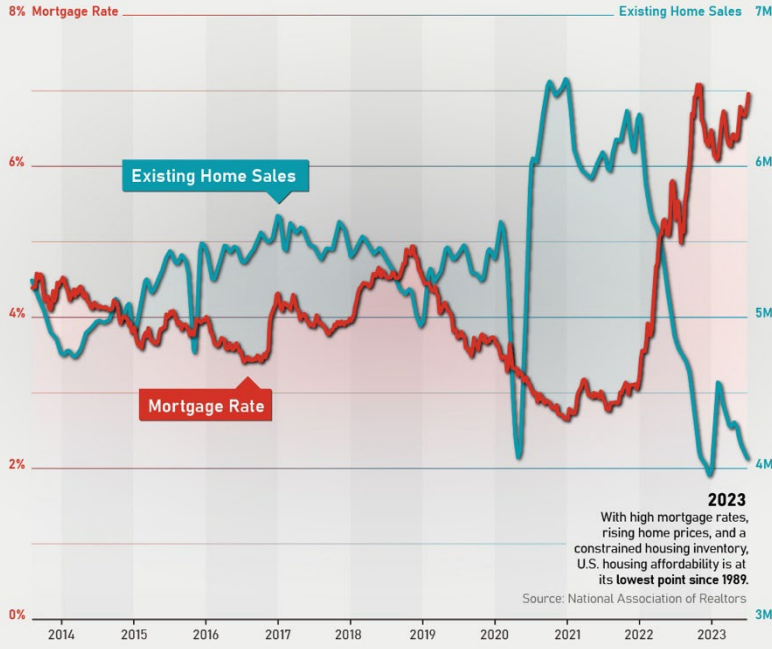
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THE U.S. Mortgage Rate Surge

The U.S. 30-year fixed-rate mortgage has reached its highest level in over 20 years.

U.S. 30-YEAR FIXED-RATE MORTGAGE VS. EXISTING HOME SALES



Sources: FreddieMac, Trading Economics

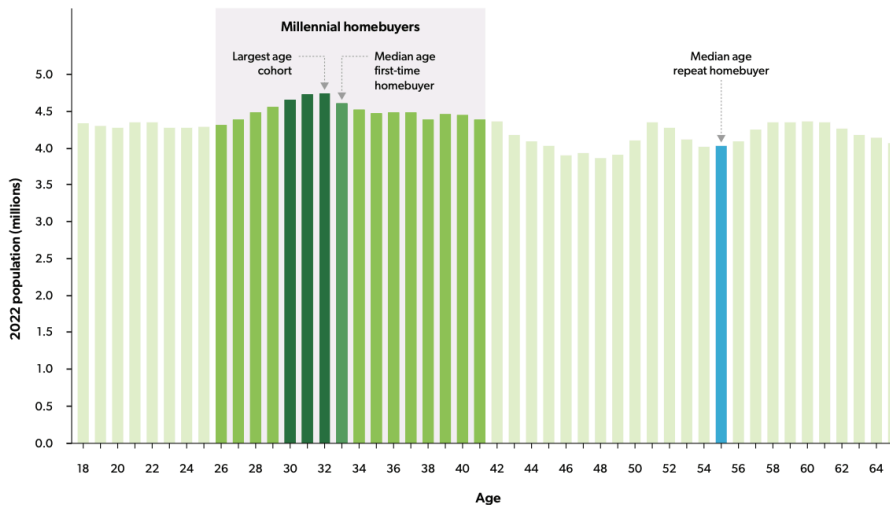


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U.S. population by age, 2022

Peak purchase demand is found between 30 to 40 year old homebuyers



Accelerate Change to Win

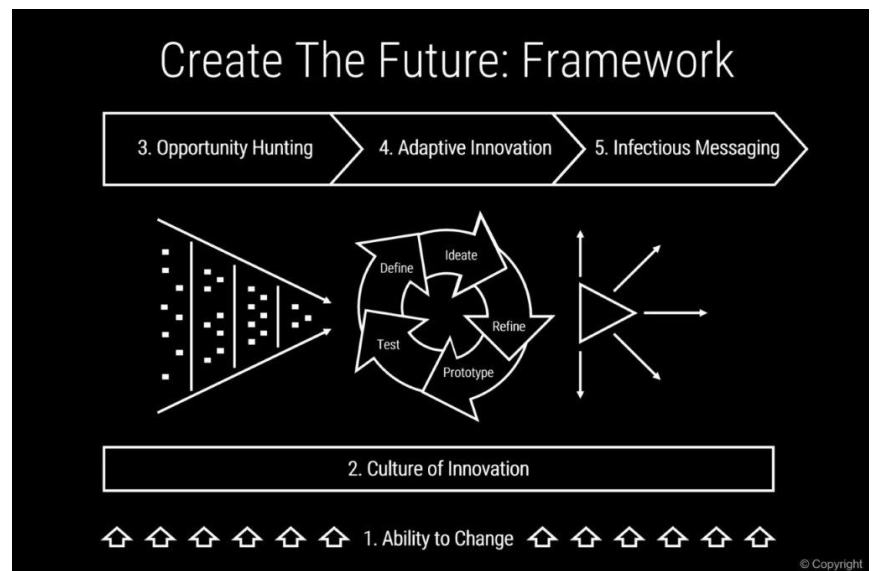
Solve the housing crisis using a framework for the future and Diffusion of Innovations Theory.

Albert Einstein's 3 Rules of work:

1. Out of Clutter, find simplicity.
2. From discord, find harmony.
3. In the middle of difficulty lies opportunity.

The housing crisis is undoubtedly creating difficult times for service members who are ordered to move and find new homes. This feat is something many Americans prefer not to do in a housing market like we see today. When an installation faces a 400-500 dorm room shortage and a private market housing shortfall of 1,843, you quickly realize how difficult the situation is. Difficulty creates opportunity.

Learning about IGSA's and becoming aware of the first and largest multifamily property our community has seen in decades were opportunities. Our off-base housing initiatives (off-base lease and IGSA with ENMU) were wins achieved at an accelerated pace. What does an organization need to spot opportunities and accelerate change? Why do the culture and subcultures of our organizations play such an important role? How do frameworks for creating the future and a culture of innovation, and understanding Diffusion of Innovations Theory help? This section aims to answer all these questions. The frameworks offered here are credited to Jeremy Gutsche, author of *The Innovation Handbook*; and *Create the Future – Tactics for Disruptive Thinking*.



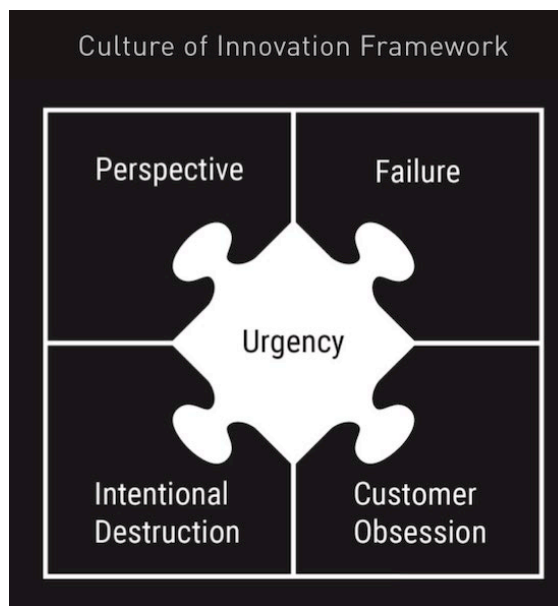
In Gutsche's, *Create the Future* Framework above, you see the principles of Design Thinking in his Adaptive Innovation step. It all begins with the Ability to Change. Gutsche states that the ability to change is more important than culture, and our ability is hindered by seven traps that all relate to your expertise. He refers to these hindrances as *The Seven Traps of Dependency*. People miss out on the ability to change because they lead busy lives and get caught up in a predictable groove, repeating past decisions and processes. This makes it difficult to spot opportunity and impedes our

willingness to act. Even when people have a great idea, it can be a struggle to garner support, influence others, and make change happen. It does not have to be that way.

7 Traps of Dependency:

1. The Subtlety of Opportunity
2. Neurological Shortcuts
3. The Ease of Inaction
4. Optionality
5. The Traps of Success
6. Linear Thinking
7. Discomfort vs. Breakthrough

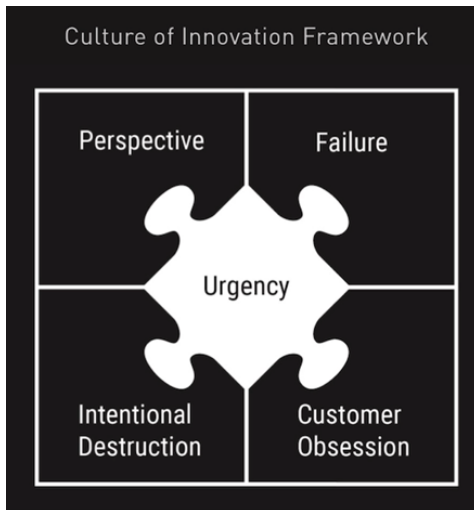
Gutsche's step two: Culture of Innovation, earns its own framework and requires five ingredients with urgency at its core. Culture is more important than strategy. Culture underlies an organization's ability to adapt, and at times of dramatic change, magnify its importance. Organizations likely perceive the need to adapt, but uncertainty and resistance are paralyzing innovation. Accelerating change to win the future begins with a culture of innovation.



Urgency and the ability to act is the fuel that enables a culture to achieve results in times of change. Urgency equals necessity. According to Toffler and Associates, if necessity has been the mother of invention for the last 200 years, then innovation is now the Father of Necessity. A change to this classic idiom means that satisfying needs with an invention does not produce game-changing or paradigm-shifting innovation. Urgency also prevents organizations from just going through the motions of innovative efforts. Innovation for the sake of innovation spells inefficiency, and must be avoided.

Perspective is the way you look at the future and the problems that you are trying to solve. Your perspective determines your destiny. This paper's first section addressed urgency and the value of perspective.

Failure means navigating through chaos that requires an organization to adapt and change. This requires a culture that encourages test and experimentation, understands the anatomy of failure, expects failure to be part of the innovative process, and sees failure as a learning opportunity. If organizations and individuals do not learn from failure in small manageable chunks, then we will learn them all at once, with interest. There are different kinds of failure, and to deal with failure, you need to differentiate



among them. Dave Blair, USAF, offers three types. First, and most inexcusably, are failures by choice. Choosing to be negligent, choosing not to plan, and choosing not to learn are all failures by choice. Second are failures by chance. A pilot can have the ideal parameters to launch a weapon from an aircraft, but sometimes you miss – because it is a probability of kill. Lastly, and the most useful, are the failures by concept. Used correctly, “failure by concept” is the engine that drives organizational adaptation. When this failure is properly employed resources are released from failed concepts, lessons learned are captured, and the incentive to innovate is renewed.

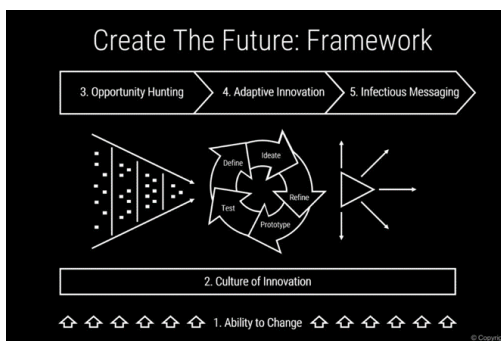
Customer Obsession means that breakthrough ideas and disruptive innovation stem from a deep understanding of the customer. I recognize that the DoD does not build Toyotas or design iPhones but that does not mean we should not approach our Service Members as customers when it comes to supporting them and their families, especially for housing. How many housing standards have we set or resourcing decisions have we made across the DoD without understanding our customer?

Intentional Destruction means that for some organizations to adapt, we must intentionally destroy. We need to break down the structure and hierarchy that prevents us from seeing the realities of change. The next section of this paper will revisit this topic.

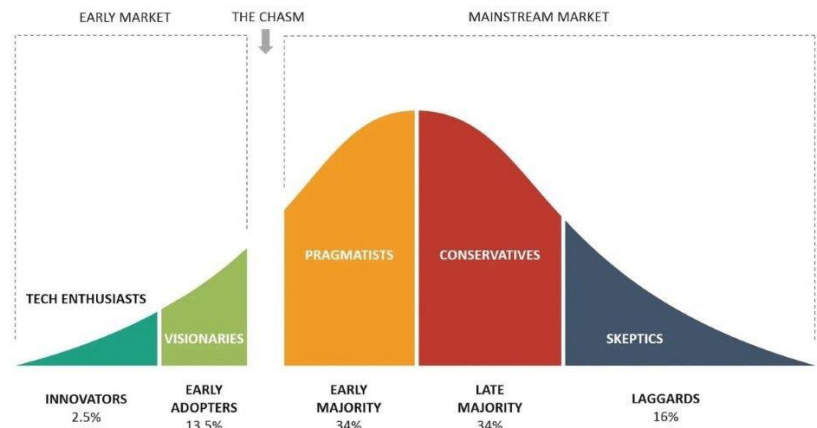
Moving back to the third step of Gutsche’s *Create the Future Framework*, Opportunity Hunting shows that innovation and strategic advantage hinge on the ability to anticipate trends and identify the next big thing. By casting a wide net and clustering ideas, you can filter through chaos to identify patterns of opportunity. Innovation efforts will be more focused.

Adaptive Innovation breaks innovation down into two parts; a set of circular steps based on Design Thinking and tactics to manage innovation like a stock portfolio. Engineers, designers, and scientists have invested billions of dollars to perfect human creativity. Opportunities can be rapidly created if we think big while acting small, but in chaotic markets you must adapt and stay on course.

Finally, Infectious Messaging means you need a well-packaged story if you want your innovative ideas to break through all the noise and resonate with the masses. Thanks to the information age, we live in a world cluttered with chaos and full of noise. Infectious messaging can prove difficult.



These frameworks offer a path to innovate and lead change. But cultural transformation success will always come down to individuals, both inside and outside your organization. This is why meaningful relationships and strong partnerships are key to accelerate change. Understanding the Diffusion of Innovation Theory will help achieve transformational cultural change. The model, developed by E.M. Rogers in 1962, shows that at a macro level, people can be classified according to their willingness to adopt newness and innovation.

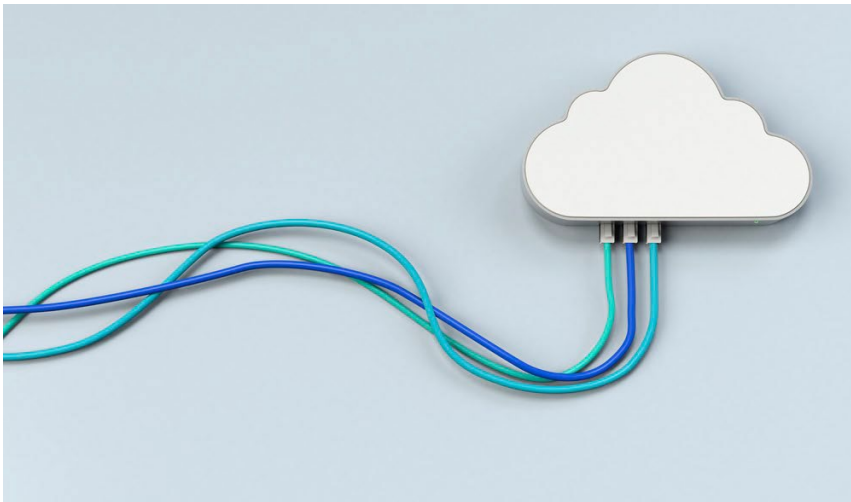


Innovators are the “Big Idea People.” Think Steve Jobs and Elon Musk. Early Adopters are people interested in trying new ideas, concepts, and products. They are willing to sacrifice time, energy, and money to be a part of something that reflects their own beliefs. Today we refer to these early market participants as “influencers.” The Early Majority and Late Majority make up the general population. They are cynical and practical, take comfort in traditional thinking, familiar products, well-established processes, and conservative ideas. Laggards are people who change because they have no choice. The theory proposes that no matter what, you should always get ten percent of the population to adopt newness.

The space between each group indicates the “Credibility Gap.” This exists because people prefer to listen to other people who belong in their group. The biggest gap is known as “The Chasm.” It was a later adoption to the model by Geoffrey Moore to show that the Early Adopters and Early Majority behave very differently from each other than any other group. Crossing the Chasm, achieving 16-19% adoption, is the point when a product, trend, idea, or market transitions to the Early Majority stage. This should be the goal of any organization since it means you are on the path to widespread adoption. Author Malcom Gladwell refers to this as the “*The Tipping Point*.” Crossing the chasm is not easy and should be thought of like securing a beachhead. Any cultural transformation will succeed when it is effectively communicated and the message is tailored to each group, but communication is primarily focused on the Early Market.

Gladwell's Tipping Point Keys to Success:

- Law of the few: there are certain types of people who are much more effective to broadcasting an idea and get people to follow suit.
- Stickiness Factor: messengers can only succeed when the message is one that will catch on – it must be “sticky.”
- Power of Context: altering the physical environment or social context in which people receive your message makes them more receptive to it.



Enterprise-Wide Solutions to Common Challenges

Create a housing environment our Service Members deserve with bold changes to law, policy, resourcing strategy, and budgetary processes that creates more housing opportunities and enables decisions to be made at the speed of relevancy.

I've spent most of my 19-year career as a special operations pilot in AFSOC, the Air Component of Special Operations Command (SOCOM). I have learned that accelerated change is engrained in our culture and in our SOCOM priorities of People, Win, and Transform. In short, the priorities mean our people are the reason we win and as stewards of precious resources, we will transform via innovation and changes to our people and organizations to meet current and future challenges. Change is in our Air Force culture and reinvigorated through General Brown's *Accelerate Change or Lose* paper. It does not matter if the tag line is "accelerate change to win" or "accelerate change or lose", both are calls for change. I elected to "gain frame" the message in the previous section instead of "loss framing" it since we are discussing how to solve the housing crisis versus not losing a war against a great power competitor. However, these two goals are not mutually exclusive despite how outlandish that might seem. Across the DoD, we all know we need to change to meet an evolving security environment, but do we really need to change how we do housing? In my opinion, it is a resounding yes.

Recall the concept of Intentional Destruction under the Culture of Innovation Framework in the previous section. In Colonel John Boyd's masterwork *Destruction and Creation*, the great airpower architect argues that organizational learning is as much a function of well-directed failure as well-directed success. His model implies that an organization that does not make room for destruction of old frameworks – one that does not allow for the

Intentional Destruction: means that for some organizations to adapt, we must intentionally destroy. We need to break down the structure and hierarchy that prevents us from seeing the realities of change.

possibility of imperfection will stall quickly just like an engine firing on one cylinder. Entropy is messy, but without it there can be no motion.

Before becoming the 21st Chairman of the Joint Chiefs of Staff, General Charles Brown approached this topic during his tenure as the Air Force Chief of Staff through his Action Order B – Bureaucracy. He states bureaucracy exists in all large organizations, and altering culture and practices that prevent timely and effective decisions is difficult. He further describes the situation as “decision-making remains cumbersome, slow, allows for soft vetoes without accountability, and prioritizes compromise and consensus over decision quality. Mired in hierarchical process and content with the status quo.” General Brown calls on the Air Staff to adapt and he outlines his intent to make decisions faster. He states the need to change its culture to empower decision-making and risk-taking while holding leaders, supervisors, and action officers accountable to this new culture. Finally, he states success will be measured in terms of decision speed (time in coordination), quality of decision support (data and variety of options), and greater alignment across the Air Staff. In fact, out of his three Action Orders (Airmen, Bureaucracy, and Competition), he opines that AO-B has proven to be the most elusive and challenging Action Order to realize.

In a White Paper titled *Air Force Unaccompanied Housing: An Emerging Challenge* written by Fred Meurer and Steve Bonner in 2018, they used Dyess Air Force Base (DAFB) as a case study to highlight challenges installation’s face with dormitories and offered possible solutions. Fred Meurer has been on the quest to provide safe and affordable housing for Service Members since 1981. This is longer than most. The paper is full of wisdom, great ideas, and prescient thinking. Meurer and Bonner state, “the USAF is facing an emerging challenge with older dormitory buildings and lacks the funding necessary to replace aging facilities.” They appreciated the tough decisions Air Force leaders face and recognized they would need help from Congress. Further, they state that they “didn’t believe the problem was extensive throughout the USAF yet, but logic and anecdotal evidence suggest that finding a solution sooner rather than later would be prudent.” I couldn’t agree more with Meurer and Bonner’s paper because unbeknownst to these two gentlemen in 2018, CAFB was also facing an emerging challenge; years before it developed into our current crisis.

I understand our dormitory MILCON project has been the installation’s number one priority for three years as well as AFSOC’s top priority. We have seen the construction cost estimates go from approximately \$50M to now \$90M in three short years and will not be move-in ready until 2028. Delayed investments will always cost more in the outyears. When an installation is forced to deal with a dorm room deficit for 10 years, then it is not a failure by choice, nor a failure by chance, but instead a failure by concept.

In my opinion, I see no viable path to solve our installation’s housing shortages in a timely and effective manner within the constructs and concepts that currently exist within the DoD. At least not without a cultural and innovative transformation that includes bold changes to law, policy, bureaucratic and budgetary processes, funding strategies, and decision-making. Until then, I believe the most agile and effective solution to the housing crisis rests within the private market utilizing strengthened relationships with community

partners and business stakeholders. This will require an introspective look across the DoD on what it means to be a “good business partner.” Further, it will require a re-examination of authorities and bureaucratic decisions to be made with new perspectives and at the speed of the housing market. Not all Meurer and Bonner’s solutions will be revisited here since they covered them so eloquently in their own paper but let us review some.

There is no better time than now for a whole-of-government approach to incentivize economic development to provide safe and affordable housing for our military and their families. This is especially important for remote and isolated installations surrounded by smaller communities. The U.S. Government incentivizes economic development regularly, like we see in the Nation’s transition away from internal combustion engines to zero emission vehicles. Why would we not incentivize economic development for housing our Service Members?

To start, I offer that Military Departments should employ a “Build to Lease” strategy through both public-private, and public-public-private partnerships. Homes should be built to meet family housing, unaccompanied housing, and dormitory requirements. Both on and off-base options must be pursued as well. These lease agreements must take a long-term view, like the way we take a 10-year view to IGSA’s. Long-term agreements enable developers to build their financial models with increased accuracy and will help reduce business uncertainty which is essential given the market headwinds we now face. Lease terms and conditions that allows an installation to expeditiously terminate a lease provides flexibility for an installation, but I suspect those stipulations are rarely executed. I believe the risk of any lease not including these terms and conditions can be effectively managed at the installation level that still preserves resource stewardship and prevents insolvency of community stakeholders. I would argue that the greater risk is not fulfilling the housing needs of the installation than lacking flexible terms and conditions in a lease.

On the financing front, developers need access to more favorable construction loans and better long-term financing through federal lending programs offered through the Federal Housing Administration. I believe this is a fair ask since they will provide housing for military members and their families. This will offset unfavorable financing terms a developer faces with terms and conditions that allow the military to expeditiously terminate an agreement since this is viewed as higher risk by lender underwriters. Additionally, Departments should be allowed to make direct loans to persons in the private sector to provide funds to such persons for the acquisition or construction of housing units that are deemed suitable for military housing. This is like previous initiatives outlined in the Defense Authorization Act of 1996. All these ideas can reduce costs and increase affordability, turn a deal from unfavorable to favorable, and increase the number of developers willing to do business with the DoD. Developers and investors alike are either avoiding or thinking twice about entering into any agreement with the DoD that is filled with uncertainty, additional risk, and only achieves an Internal Rate of Return of seven percent. Why would investors put capital at risk when they can get a risk-free return of nearly five percent in Treasury Bills? This is known as Opportunity Cost and the

DoD must be postured to tilt an investor's investment decisions in its favor since the DoD will compete with other market participants.

The cost saving initiatives mentioned above could be applied to Military Housing Private Initiatives (MHPI) as well. CAFB benefits from an MHPI with Balfour Beatty Communities, and an expansion would help alleviate our housing shortages, especially with an unaccompanied privatized housing project. I believe the MHPI at CAFB is a success and it is evident in the demand for on-base housing from our Airmen. Our effective occupancy rate is 100 percent and consistently has a waitlist of nearly 300 families.

Serious consideration must be given to pursue more "Build to Lease" agreements versus MILCON projects. This agreement will require a timely opportunity or created one, a willing community stakeholder, and could meet the requirement sooner since MILCON is often late to need. I find the \$90M estimated cost to construct a USAF standard 192-person dormitory at CAFB astonishing. I have tried my best to make sense of this since I am a pilot, and not a civil engineer. In Creative Thinking, you can use the "What If" tool to induce provocation and hack your brain to think differently. To shift your perspective, you can use the "No Limit" tool to remove limitations and assumptions to find novel solutions. Here is a practical example. What if we used the \$90M for a different solution based on a no limit standard to provide housing for 192 dorm-eligible Airmen? At \$468K per room and at \$1.87M per quad (four rooms with a common area) gives us plenty of ideas to explore. Apply these tools to your own MILCON dormitory projects for your area and see what you imagine.

Based on Meurer and Bonner's research, I believe law, policy, and budgetary processes and constraints remain the biggest hurdles preventing private sector capital or non-federal public capital from being used to supplement the Congressional Appropriations process. We need legislative changes to reverse the unintended consequences that the DoD experiences from the Office of Management and Budget (OMB) and Congressional Budget Office (CBO) scoring rules that are based on the Balanced Budget and Emergency Deficit Control Act of 1985, and the Budget Control Act of 2011. A restoration of the OMB scoring relaxations that were eliminated in 2014 would provide relief, albeit temporary. Laws should be amended that allow the DoD to apply more business-like financial modeling to their capital expenditures, especially for housing. I believe the rule that requires a federal agency to offset the entire life-cycle costs of projects against their budgets in the year they are constructed, as opposed to amortizing these costs of 20 years or more as they would in the private sector makes little sense. Choosing to use the BAH option to provide the cash flows in the "build to lease" agreements proposed above could be beneficial in navigating the Congressional Appropriation challenges. However, no guarantees for occupancy or cash flows can be made under current law (USC 403 – Basic Allowance for Housing). I recommend a robust legislative affairs team who will petition Congress for these legislative changes.

The DoD could also benefit from a "Working Capital Fund" to be used for timely investment opportunities, adapt to the changing market cycle, and offset macroeconomic headwinds. This will take a more "investor mindset"



CANNON AIR FORCE BASE
Unaccompanied Privatized Housing

Balfour Beatty
Communities

approach instead of a “budget execution” one that currently dominates not only the DoD, but the U.S. Government. Meurer and Bonner shared that the State of Texas has a fund called the Defense Economic Adjustment Assistance Grant (DEAAG) and a bond-based loan fund that could be tapped for capital. The City of Abilene, Taylor County, Development Corporation of Abilene, and other local government entities could also provide capital or in-kind development support. The authors share that the marriage of public and private investments is not a new concept since we see these through major infrastructure projects, stadiums, convention centers, and affordable housing. Further, they suggest that this could overcome risk aversion of private capital but needed further exploration.

Why does solving the housing crisis matter so much to CAFB? Where does our drive to find innovative solutions at an accelerated pace stem from? Why do we work to strengthen relationships with our community partners and value their support? For answers, we need to turn to culture one more time. CAFB culture is centered on our Air Force and SOCOM core values and grounded in our SOF Truths.

Solving the housing crisis will require creativity, respect, and excellence. All of which reside in our core values. There are multiple things that affect quality of life of our Airmen, but housing remains a top concern. Perhaps because housing costs remain the largest part of family budgets. In AFSOC, our Human Capital Council assess our Airmen across a range of mission support and personal resiliency factors. We meet quarterly to discuss the findings. I suspect many other installations do the same thing. Airmen’s concerns with housing, especially with the cost-of-living surfaces in Financial Readiness. Financial Readiness of our Airmen is Mission Readiness. Our installation has a no-fail alert mission, and we need Airmen to remain focused on the mission and act as a cohesive unit. They should not have to stress about where to live or wonder if they can afford the housing they deserve.

Once the housing crisis is solved, we might see an increase in retention rates of first assignment Airmen and improved manning experience levels with less Airmen opting out of a move to CAFB for their second assignment in the Air Force. Airmen are more valuable to us than hardware (SOF Truth I) and we cannot let talent slip away due to quality of life concerns. Improve the quality of life, you improve the quality of mission.

SOF Truth V states most special operations require non-SOF support. In that spirit, our installation needs strong relationships and community partnerships to enable us to increase our mission effectiveness and improve the quality of life. The world is evolving quickly and dangerously. And in war, what is past is rarely prologue. The next war may be closer to home than we would like or imagined. Installations must continue to improve mission assurances and build resiliency in our communities. Without partnerships, we would have limited success. CAFB must rely on these invaluable relationships between both our community partners and higher headquarter teammates to succeed in our collective efforts. Taking care of military members, their families, and the people within our communities, must remain at the heart of every action we take since our human capital is our competitive advantage.

Air Force Core Values:

- Integrity first
- Service before self
- Excellence in all we do

SOCOM Core Values:

- Honor – earn the trust of the Nation by doing what is right.
- Courage – be steadfast in the face of physical and moral danger.
- Excellence – commit to achieving the highest possible standards.
- Creativity – seek innovative and novel solutions to the hardest, most complex problems.
- Respect – Treat our teammates and partners with the highest regard.

SOF Truths:

- Truth I – Humans are more important than hardware.
- Truth II – Quality is better than quantity.
- Truth III – Special Operations Forces cannot be mass produced. possible standards.
- Truth IV – Competent Special Operations Forces cannot be created after emergencies occur.
- Truth V – Most special operations require non-SOF support.