

TAMU ACA

An interdisciplinary effort for diversity
Excellence in Diversity Awards Submission
April 20, 2017

antoni KWIATKOWSKI | BLA
natalie SOMERVILLE | BLA
john TIMBERLAKE | GIST
euntaek YOON | BLA
hao HUANG | MARCH

ABSTRACT

Our interdisciplinary team has measured and weighed current ADA standards and found them wanting. To ensure a more inclusive campus, we are proposing a new set of regulations, directives, and statutes for buildings across campus, and possibly nationwide, to incorporate into their design.

We would like to introduce the Aggie Code of Accessibility (ACA) which will result in a campus that addresses all forms of disabilities and provides accommodations for all. We have been inspired by the struggles of our fellow aggies, and we hope to ensure that these challenges do not persist. ACA will set a standard above that of ADA, which currently addresses the bare minimum in regards to accessibility. This is an opportunity for Texas A&M to overtake tired standards and realize universal accessibility. Our vision is a campus where students no longer search for an accessible entrance, where students are able to navigate campus with ease, and where students can find comfort in healing spaces.

We have developed the concept of Universal Design (UD) in our project. Universal Design is designing all products and the built environment to be accessed, understood and used to the greatest extent possible by everyone, regardless of their age, ability, or status in life. Valuing differences in terms of celebrating diversity is becoming more and more important. According to Erkiliç Mualla, UD explores multiuse differentiation of diversity of spaces and seeks social inclusion through design (1). Furthermore, we propose the marriage of universal design with biophilic design, implementing sensory enhancements to these newly accessible spaces and utilizing nature to improve the mental and emotional states of students and faculty.

The goal of ACA is to implement these standards into the designs of both the future Disability Services Building and the entrance to Sterling Evans Library. In our proposed model, the Disabilities Services Building is highlighted as the epitome of universal accessibility nationwide. Evans Library, situated in the heart of campus, will serve as a highly visible test subject for feasible modifications to the existing buildings throughout campus. ACA codes will not only focus on accessibility across campus, but also on mental health, quality of life, and students' physical well being by providing restorative spaces.

GOALS

REINVENT THE TEXAS A&M
CAMPUS THROUGH THE
LENSES OF:

A NEW PARADIGM IN
**UNIVERSAL
ACCESSIBILITY**

AND

POSITIVE REASSOCIATION
THROUGH
**BIOPHILIC
DESIGN**

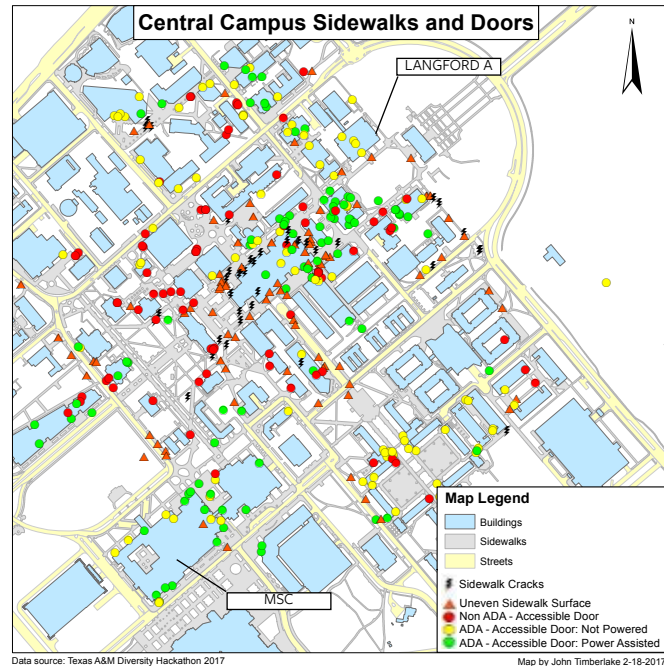
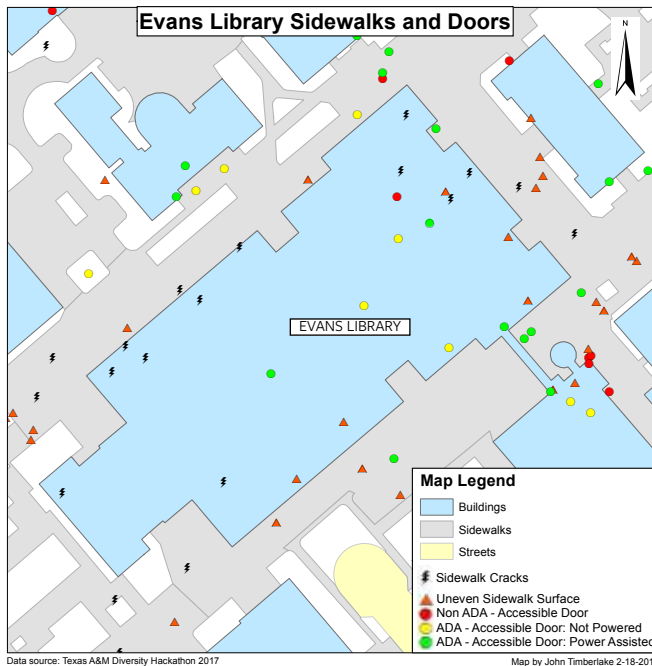


FACTS

CURRENTLY, PEOPLE OF VARYING ABILITIES FACE A SLEW OF CHALLENGES ON CAMPUS.

GIS DATA SHOW THAT A HOST OF PROBLEMATIC ACCESS POINTS PERSISTS,

DESPITE MEETING ADA REQUIREMENTS.



FACTS, CONT'D

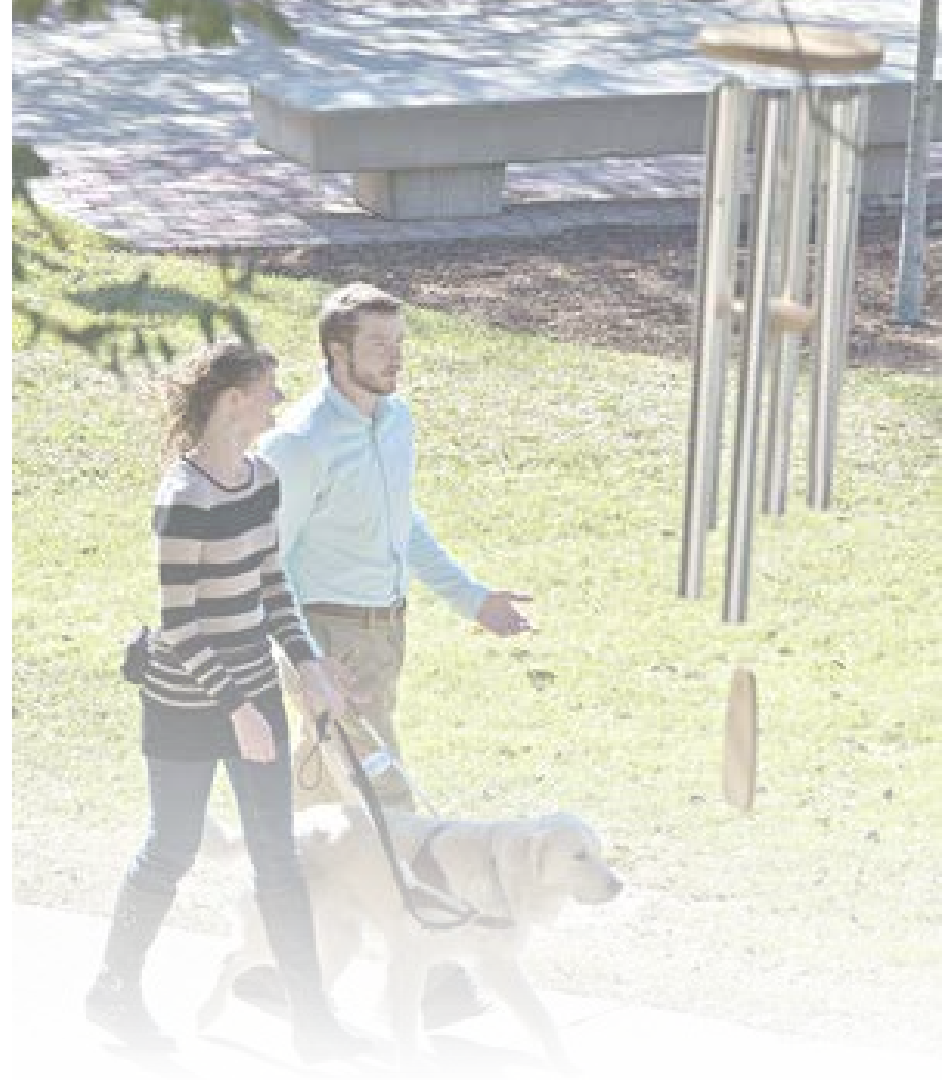
“The first test of universal design is that it must be supportive.... it must not, in providing such aid, create any undue burden on any user” (Null, Cherry 28).

“Someone who was visually impaired couldn’t see the call numbers, so we sent student workers upstairs to find the item for the student. it became just the normal procedure for whenever the student came to the library. we kinda had a system to help with accomodations for the student.”

JACK HANSEN

EVANS LIBRARY STUDENT WORKER

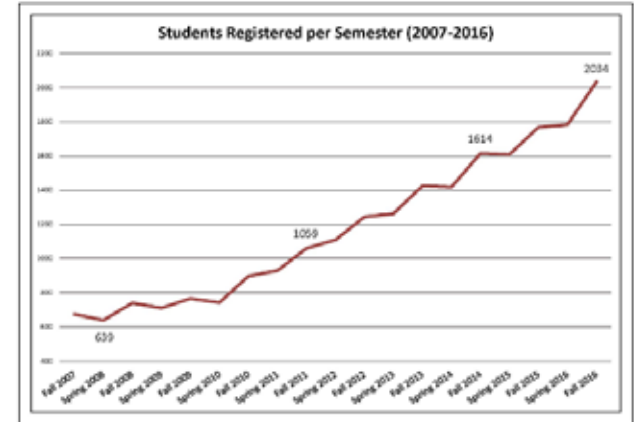
ALTHOUGH THERE ARE PROCEDURES IN PLACE TO HELP THE DIFFERENTLY-ABLED, THESE ARE OBSTACLES THAT THEY WOULD OTHERWISE NOT HAVE TO NAVIGATE, WERE THE ENVIRONMENT CONSCIOUSLY DESIGNED.



NEEDS

Number of Students with Disabilities at TAMU

Academic Year	Fall	Spring	Summer
2005-2006	635	645	151
2006-2007	666	629	133
2007-2008	674	639	148
2008-2009	739	710	160
2009-2010	765	741	172
2010-2011	897	929	220
2011-2012	1059	1108	235
2012-2013	1244	1262	276
2013-2014	1425	1418	341
2014-2015	1614	1608	395
2015-2016	1768	1783	470
2016-2017	2034		



Number of Disabilities (Diagnoses) by Category

Category	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
ADHD	263	297	348	426	522	637	697	789	858	955
Autism	5	9	12	17	17	20	27	31	26	38
Deaf/Blind	0	1	1	1	1	0	0	1	2	1
Health Related	96	111	114	137	177	228	276	313	350	414
Hearing/Deaf	43	53	49	38	44	53	50	69	84	89
Learning	424	448	448	480	484	523	534	589	664	800
Mental Health	214	222	216	248	287	318	378	452	523	692
Orthopedic	35	38	37	31	48	60	63	69	79	100
Speech Impairment	10	12	15	17	11	22	20	19	27	32
Temporary	12	8	16	17	20	19	28	30	22	34
Traumatic Brain Injury	21	21	17	24	29	29	31	47	48	58
Visual/Blind	40	46	48	64	61	46	74	78	98	100

CAMPUS-WIDE UNIVERSAL BIOPHILIC DESIGN

HEALING SPACES FOR MENTAL WELL-BEING

EFFICIENT WAYFINDING SYSTEMS

HIGHER ACCESSIBILITY STANDARDS

AGGIE CODE OF ACCESSIBILITY

THE **AGGIE CODE OF ACCESSIBILITY**
IS MEANT FOR TEXAS A&M UNIVERSITY TO DEFINE A
NEW PARADIGM IN UNIVERSAL ACCESSIBILITY.

“ACCESSIBILITY MEANS REMOVING BARRIERS.... BY
ENCOMPASSING A BROADER RANGE OF HUMAN
ABILITIES, UNIVERSAL DESIGN SUBTLY **EMPOWERS**
INDIVIDUALS” (NULL, CHERRY 28)

AMIDST ALL THIS TALK, HOW CAN WE
EFFECT CHANGE?

THE AGGIE CODE OF ACCESSIBILITY IS BUILT UPON THE
PRINCIPLES OF **BIOPHILIC DESIGN**.



ACA/BIOPHILIA

“A theoretical examination of aesthetic values points towards the importance of elements reflecting Nature; such as complexity, choice of colors, perspective and balance. In other words, Nature itself may offer potent aesthetic stimuli”
(Grinde, Theoretical Perspectives).

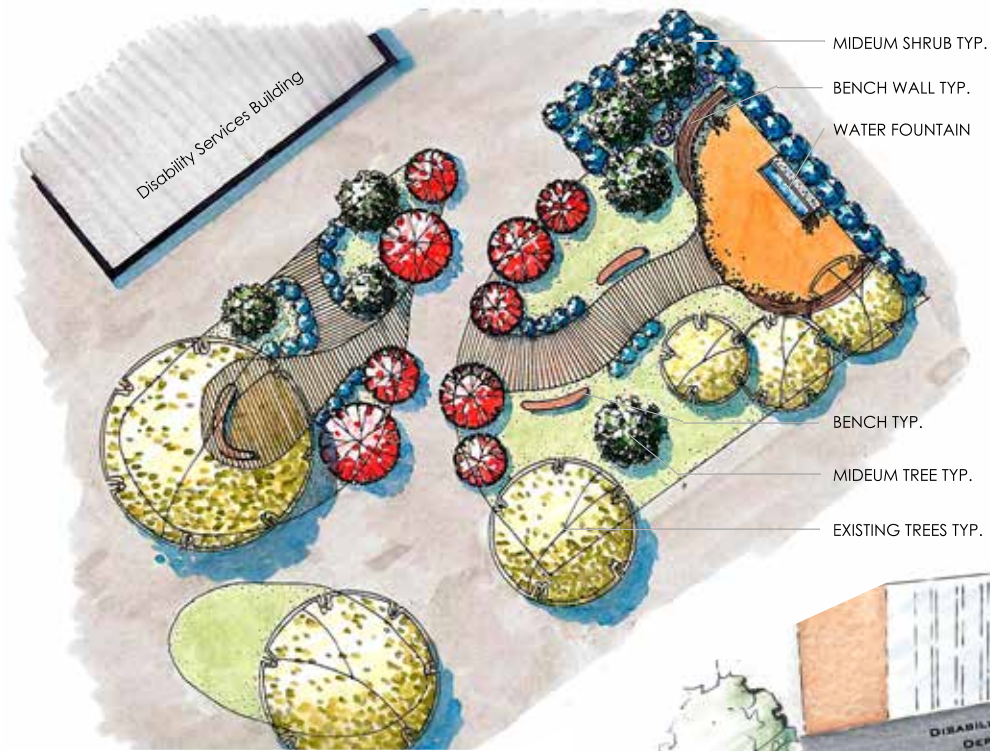
UNFORTUNATELY, UNIVERSAL DESIGN IS OFTEN ASSOCIATED WITH INCREASED COSTS AND AESTHETIC COMPROMISE. SO, WE PROPOSE PUNCTUATING UNIVERSAL ACCESS POINTS WITH UNIVERSALLY DETECTABLE PLANTINGS, WHICH WILL GENERATE INTEREST AND BEGIN THE DIFFICULT PROCESS OF POSITIVE REASSOCIATION.



DISABILITY SERVICES BUILDING

IN THE PROPOSED DISABILITY SERVICES BUILDING, TEXAS A&M UNIVERSITY HAS THE UNIQUE OPPORTUNITY TO PRESENT AN EXHAUSTIVE MODEL OF A UNIVERSALLY ACCESSIBLE SPACE.

“Biophilic design can reduce stress, enhance creativity and clarity of thought, improve our well-being, and expedite healing”
(Browning, et al.)



DISABILITY SERVICES BUILDING

THE DISABILITY SERVICES BUILDING IS A SPACE IN WHICH THE MOST INNOVATIVE, AESTHETIC UNIVERSAL DESIGN SOLUTIONS ARE EXPLORED. THE DISABILITY SERVICES DEPARTMENT, AS THE CORE OF A CAMPUS TO BE KNOWN FOR ITS DEDICATION TO UNIVERSAL ACCESSIBILITY, WILL EPITOMIZE THE CAUSE.

THE DISABILITY SERVICES BUILDING WILL BECOME THE BEAU-IDÉAL OF ACCESSIBILITY IN THE COUNTRY.



EVANS LIBRARY

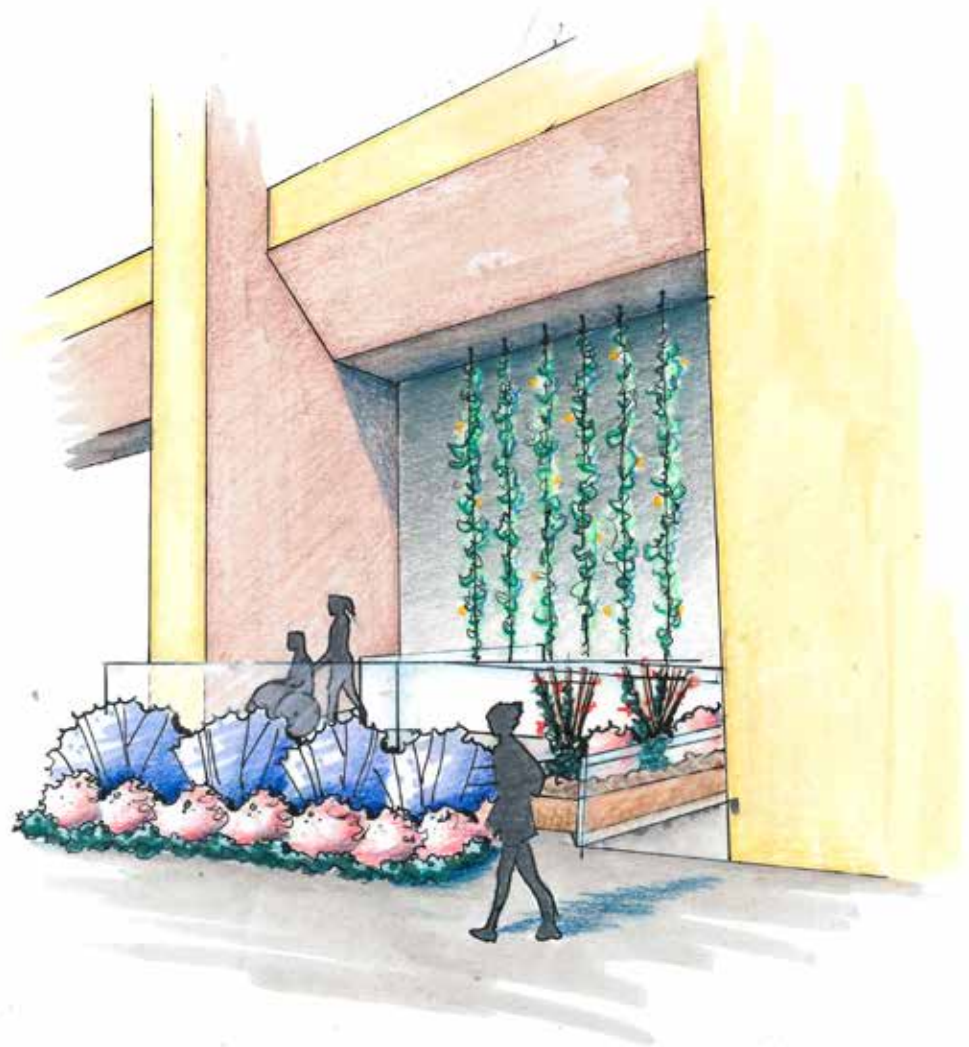
EVANS LIBRARY IS AN IDEAL LOCATION TO TEST THE IMMEDIATE APPLICATION OF THE ACA PROGRAM.

SITUATED IN THE HEART OF CAMPUS, THE IMPOSING STRUCTURE AND SURROUNDING AREA IS FRAUGHT WITH ACCESSIBILITY CHALLENGES, AND WILL SERVE AS A

HIGHLY VISIBLE TEST SUBJECT FOR FEASIBLE MODIFICATIONS TO BUILDINGS THROUGHOUT CAMPUS.



Existing Evans entrance



Rendering: Proposed bright, planted sensory cues for universally accessible entrances to the buildings on campus. Plants are selected for audiovisual, olfactory, and tactile prominence.

REFERENCES

- Browning, William, Catherine Ryan, and Joseph Clancy. "14 Patterns of Biophilic Design." Terrapin Bright Green (2014): n. pag. Web. 20 Apr. 2017. <<https://terrapinbrightgreen.com/reports/14-patterns/>>.
- Erkiliç, Mualla. "Inclusive Schools and Urban Space Diversity: Universal Design Strategies in Use." ["KAYNAŞTIRMA EGİTİMİ OKULLARI VE KENTSEL MEKAN FARKLILAŞMASI: EVRENSEL TASARIM STRATEJİSİ AÇISINDAN BİR DEĞERLENDİRME"]. METU Journal of the Faculty of Architecture, vol. 29, no. 1, June 2012, pp. 193-206. EBSCOhost, doi:10.4305/METU.JFA.2012.1.11.
- Grinde B. The biology of visual aesthetics. J. Soc. Evol. Systems. 1996;19:31-40.
- Null, Roberta L., and Kenneth F. Cherry. Universal Design: Creative Solutions for ADA Compliance. 1st ed. Belmont, CA: Professional Publications, 1996. Print.

IMAGES

- <https://landscapeperformance.org/sites/default/files/styles/lightbox/public/AT%26T-Ramp.jpg?itok=8TXZqPPs>
- <https://msc.ucenter.tamu.edu/wp-content/uploads/sites/2/2013/09/MS-C-Main83331.jpg>
- https://c1.staticflickr.com/8/7374/9700172741_d3123c660f_z.jpg
- <http://bloximages.chicago2.vip.townnews.com/theeagle.com/content/tncms/assets/v3/editorial/b/c0/b-0559bc-ce86-11e5-aa9c-bf7719ff9eac/56b8cbd20416a.image.jpg?resize=300%2C466>
- <https://www.cornerstoneondemand.com/rework/sites/default/files/resize/remote/f0f640b27d23f9d26cb->